

EPA REGISTRATION NUMBER 71995-26



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 17 2003

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ms. Rhonda M. Mannion
Monsanto Company, Lawn & Garden Products
600 13th Street, N. W., Suite 660
Washington, DC 20005

Dear Ms. Mannion:

Subject: Roundup Weed & Grass Killer Concentrate (Revise Basic CSF and Add Alternate CSFs A and B)
EPA Registration No. 71995-26
Application Dated October 8, 2003

The scientific review and evaluation of the confidential statements of formula (CSFs) submitted above have been completed. The basic and alternate CSFs A and B submitted above are acceptable and supercede all previously accepted ones. Our records have been modified accordingly.

Sincerely

James A. Tompkins
James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

G1711919151-1112611100191013

3. IS A PUBLIC LAW 94-453 NECESSARY?		4. PETITION NO.		5. RECEIVED ON DATE	
<input type="checkbox"/> YES <input type="checkbox"/> NO				<input type="checkbox"/> YES <input type="checkbox"/> NO	
6. METHOD OF SUPPORT		7. PRODUCT MANAGER		8. PROJECTED RETURN	
<input type="checkbox"/> 1A <input type="checkbox"/> 1B <input type="checkbox"/> 1C				<input type="checkbox"/> YES <input type="checkbox"/> NO	
9. DATE FILED		10. DATE FILED 3-80		11. ACTION TYPE	
12/15/03				Review Based WFO aded alt ASP 300	
				12. OUTSTANDING DATE	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
13. REVIEW TYPE	REVIEW TYPE	REVIEWER CODE (Initials)	SIGNATURE OF REVIEWER	COM. UNIT CODE	DATE REVIEW COMPLETED
A	REVIEWABILITY TEAM				
B	PRODUCT MANAGER TEAM EFFICACY REVIEW				
C	PRODUCT MANAGER TEAM HUMAN SAFETY REVIEW				
D	PRODUCT MANAGER TEAM ENVIRONMENTAL SAFETY REVIEW				
E	PRODUCT MANAGER TEAM RECOMMENDATION REVIEW				
F	PRODUCT MANAGER		UICW	NAC	11.2 115013
G	INTERAGENCY REFERRAL				
H	COST-BENEFIT REVIEW				
I	PUBLIC COMMENTS REVIEW				
J	EEC BRANCH IDENTIFICATION EFFICACY				
K	EEC BRANCH IDENTIFICATION EFFICACY				
L	EEC BRANCH IDENTIFICATION EFFICACY				
M	EEC BRANCH IDENTIFICATION EFFICACY				
N	EEC BRANCH IDENTIFICATION EFFICACY				
O	ENVIRONMENTAL BRANCH RESOURCES ENVIRONMENT				
P	EEC BRANCH ENVIRONMENTAL ENVIRONMENT				
Q	TOXICOLOGY BRANCH HUMAN SAFETY				
R	EEC BRANCH ENVIRONMENTAL SAFETY				
S					
T					
PRODUCT MANAGER SIGNATURE			TYPE OF RESPONSE		CODE



United States
Environmental Protection Agency
 Washington, DC 20460

☐
☒
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Registration
Amendment
Other

OPP Identifier
 Number

296744

Application for Pesticide – Section I

1. Company/Product Number 71995-26	2. EPA Product Manager Mr. Jim Tompkins	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
Company/Product (Name) Roundup Weed & Grass Killer Concentrae	PM # 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company, Lawn & Garden Products 600 13 th St., N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(B)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section – II

<input checked="" type="checkbox"/> Amendment – Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated
<input type="checkbox"/> Resubmission in response to Agency letter dated	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification – Explain below.	<input type="checkbox"/> Other – Explain below.

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

Submission of new alternate CSFs (A+B).

Section – III

1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per Container	If "Yes" Package wgt. No. per Container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container	5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____	

Section – IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)			
Name Dr. Marsha C. Gray	Title Registration Manager	Telephone No. (Include Area Code) (202) 383-2866	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received (Stamped)
2. Signature <i>Rhonda M. Mannion</i>	3. Title Registration Manager		
4. Typed Name Rhonda. M. Mannion Tel. (314) 694-8785	5. Date 8 October 2003		



8 October 2003

Hand Delivered

Document Processing Center (AMEND)
Office of Pesticide Programs
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2,
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

Attention: Mr. Jim Tompkins (7505C)
Product Manager (Team 25)

Subject: **Roundup Weed & Grass Killer Concentrate (EPA Reg. No. 71995-26).
Submission of Alternate Confidential Statements of Formula (A and B).**

Dear Mr. Tompkins,

Monsanto wishes to amend *Roundup® Weed & Grass Killer Concentrate* (Reg. No. 71995-26) to add two (2) new formulas, Alternates A & B. These new alternate formulas contain a slightly different surfactant [REDACTED] that Monsanto believes is equivalent to the surfactant in the current Basic formula approved by the Agency on 9 February 2000. Therefore Monsanto believes this change will have no effect on the Precautionary Text and physical/chemical properties of the product.

The proposed Alternate A formula contains the surfactant [REDACTED] instead of the [REDACTED] surfactant [REDACTED] currently approved under the Basic formula. Alternate A contains a reduced level of surfactant relative to the approved Basic formula and utilizes a [REDACTED]

The proposed Alternate B formula is essentially the same as Alternate A except that it is prepared from MON 35085 (Reg. No. 524-445), which results in a further reduction in the level of surfactant in the end-use product.

A compositional comparison of the Basic, Alternate A, and Alternate B formulas is provided in the **Confidential Attachment**.

Inert ingredient information may be entitled to confidential treatment

A revised Basic CSF is also included in this submission; it is identical to the originally approved Basic formula except that additional inert ingredient suppliers have been added for the antimicrobial and [REDACTED]. Upon approval, this Basic CSF will supercede the previous CSF dated 23 June 1999.

Enclosed with this letter are:

- Application for Pesticide (8750-1)
- 2 copies of the revised CSF- Basic
- 2 copies of the new CSF - Alternate A
- 2 copies of the new CSF - Alternate B

Should you require any additional information or have any questions, please contact Dr. Marsha Gray at our Washington office (202)-783-2878, or me directly at (314) 694-8785 or by email at rhonda.m.mannion@monsanto.com.

Sincerely,



Rhonda M. Mannion
Registration Manager

cc: M. Gray / DC Office
File copy

Inert ingredient information may be entitled to confidential treatment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 24 2002

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ms. Rhonda M. Mannion
Monsanto Company
600 13th Street, N. W., Suite 660
Washington, DC 20005

Dear Ms. Mannion:

Subject: Roundup Weed & Grass Killer Concentrate
EPA Registration No. 71995-26
Your Application Dated June 25, 2002

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable. Amended labeling supercedes all previously accepted ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

James A. Tompkins
James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

[Editorial Notes: Bracketed text [] is for internal use or serves as a 'place holder' for graphics. Parenthetical text () denotes optional wording.]

[Refer to APPENDIX 1 for consolidated list of label claims.]

[Refer to APPENDIX 2 for packaging related claims/instructions]

Roundup® Weed & Grass Killer Concentrate

Alternate Brand Names: Roundup Pull N' Spray Refill Concentrate
Roundup Pull N' Spray II Refill Concentrate

Active Ingredient

Glyphosate, isopropylamine salt 25.0 %

Other Ingredients 75.0 %

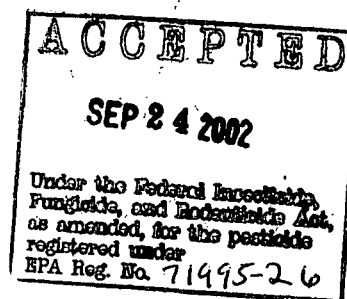
KEEP OUT OF REACH OF CHILDREN

CAUTION

See back panel booklet for additional precautionary statements.

(Read precautions and directions on back label.)

NET [xxx]



Product Facts

Treats up to xx sq ft (approx. size of XX tennis courts)

[When calculating coverage, one gallon treats 300 sq ft and a tennis court is 2,106 sq ft.]

KILLS [Illustrate grassy, broadleaf and woody weeds]

WEEDS ALL TYPES OF WEEDS & GRASSES

WHERE • On patios, walkways, driveways, gravel or mulch beds

TO USE • Around fruits, vegetables, flowers, shrubs or trees

• Along fences

• In large areas - For lawn replacement

- For garden plot preparation

• Other areas in your yard

AMOUNT For best results

TO USE • 6 fl oz (12 Tbs) per gallon of water for established or tough weeds

[For Roundup Pull N' Spray (II) Refill Concentrate]

• To refill Roundup Pull N' Spray (II)

Empty entire contents (13 oz) into empty 1.33 gallon Roundup Pull N' Spray (II) container and fill with water.

[phone icon] **Questions, Comments or Medical Information**
call (insert contact #) www.roundup.com

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS

[optional tank sprayer illustration]

Tank Sprayer (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- For easy to kill weeds such as seedlings, add 3 fl oz (6 Tbs) to 1 gallon of water
- (For tough established weeds / For best results,) add 6 fl oz (12 Tbs) to 1 gallon of water
- Spot treat or spray evenly over 300 sq ft.

[optional DNS illustration]

Hose-End Sprayer

For large areas consider using the Ortho Dial 'n Spray®

- Set dial to 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. DO NOT add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

[optional PNS (II) illustration]

Roundup Pull N' Spray (II)

- Add entire contents of 13 fl oz Roundup Pull N' Spray (II) Refill Concentrate to the empty Roundup Pull N' Spray (II) container and fill with water.

OR

- Add 13 fl oz of Roundup Concentrate to the empty Roundup Pull N' Spray (II) container and fill with water.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

Do not (mix, store or) apply with (in) a galvanized or unlined steel (except stainless steel) sprayer, or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

HOW TO APPLY [optional illustration]

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a sheet (piece) of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

IMPORTANT

Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

WHEN TO APPLY [optional illustration]

- Apply when weeds are actively growing. (Use anytime weeds and grasses are

actively growing.)

- For best results, apply during warm, sunny weather (above 60° F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- [*insert brand name*] is Rainproof in 2 hours (30, 45, 60, or 90 minutes; 1 hour; less than 1 hour; less than 60 minutes; less than 30 minutes)
- [*Alternate text*] (RAIN-PROOF:) Rain or watering 2 hours (30, 45, 60, or 90 minutes; 1 hour; less than 1 hour; less than 60 minutes; less than 30 minutes) after application will not wash away effectiveness.
- [*optional text*] Apply when weeds are small and before seeds form. Established (Hard to kill) weeds may require a repeat application.
- If used to control weeds around fruit or nut trees, caneberries, or grapevines, allow 17 days before harvesting.

ADDITIONAL TIPS [<i>optional illustration</i>]

- **To Kill Vines**

- If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 feet and spray vines thoroughly.
- If vines are climbing shrubs or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a sheet (piece) of cardboard or plastic.

- **To Kill Stumps**

- Cut living stump close to ground.
- Drive (drill) 4 to 5 holes into freshly cut stump.
- Immediately pour undiluted product into holes.

- **For Lawn Replacement**

Use Roundup [*or insert brand name*] to kill a (an old) lawn and (its) weeds before planting (a) new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

[*Alternate text*]

- Wait 7 days for weeds and lawn to die. Repeat if necessary.
- Rake or till to prepare area for planting seed or sod.

- **Kudzu**

For best results, apply in mid to late summer when vines are mature and actively growing.

- **Wild Blackberry**

Spray anytime plants are actively growing. Dead canes should be cut down and removed. Reapplication is often required to kill deep roots.

- **Poison Ivy & Poison Oak**

Contact with these plants anytime of the year can cause an allergic reaction. Spray anytime plants are actively growing, but at least 4 weeks before the first killing frost in the fall. Reapply, if new growth appears. Handle dead plants with rubber gloves. Dispose of plants and rubber gloves in tightly sealed garbage bags.

- **For Flowerbed & Garden (Plot) Preparation**

Use Roundup [*or insert brand name*] to kill weeds, grasses and brush before planting flowers, fruits, vegetables or herbs.

- If soil is dry, water before application and 2 to 3 days after application.
- Apply evenly over treatment area.
- Wait the number of days indicated below before planting.

WHEN TO REPLANT [<i>optional illustration</i>]

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:
Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato, radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.
- The following fruits, vegetables and herbs may be planted **3 days after** application:
Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all), pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.
- Lawn grasses may be planted **7 days after** application.

WHEN TO HARVEST [<i>optional illustration</i>]

If used to control weeds around fruits or nuts, allow the following number of days before harvesting:

- Citrus (citron, grapefruit, lemon, lime, mandarin, orange, tangelo and tangerine) – **1 day.**
- Nuts (almond, beechnut, cashew, chestnut, hazelnut, pecan, pistachio and walnut) – **3 days.**
- Apple, avocado, banana (plantains), berries (except cranberries), dates, figs, grapes, kiwi fruit, loquat, passion fruit, pear, persimmon, pomegranate and quince – **14 days.**
- Apricot, cherries, nectarine, olives, peach, plum and prunes – **17 days.**

(OR)

- If used to control weeds around fruit or nut trees, caneberries or grapevines, allow 17 days before harvesting.

HOW IT WORKS *[optional illustration]*

Roundup [*or insert brand name*] enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found in plants. Any product (Roundup) [*or insert brand name*] not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

*[Optional section]***KILLS ALL TYPES OF WEEDS & GRASSES** *[optional illustration]*

Weeds (including): Artichoke thistle, beggarweed, black medic, blue mustard, blue toadflax, brassbuttons, broadleaf plantain, burclover, buttercup, Canada thistle, cattail, chickweed, cocklebur, common groundsel, common mullein, common plantain, common ragweed, creeping beggarweed, creeping-charlie, curly dock, dandelion, dog fennel, evening primrose, false dandelion, fiddleneck, field bindweed (wild morningglory), field pennycress, filaree, Florida pusley, garden spurge, henbit, horsetail, horseradish, horseweed/ maretail, iceplant, knapweed, knotweed, lambsquarters, lantana, little bittercress, London rocket, mallow, mayweed, milkweed, mouseear chickweed, narrowleaf (buckhorn) plantain, nightshade (silverleaf), oldenlandia, oxalis, Pennsylvania smartweed, pennywort, poison hemlock, prickly lettuce, primrose, prostrate spurge, puncturevine, ragweed, red clover, redroot pigweed, shepherdspurge, smooth catsear, smooth pigweed, sowthistle, spotted spurge, tansy ragwort, tansymustard, teaweed, trumpetcreeper, tumble mustard, Virginia creeper, white clover, whitetop, wild barley, wild mustard, wild oats, wild sweet potato, yellow starthistle, and other broadleaf weeds

Grasses (including): Annual bluegrass, annual ryegrass, bahiagrass, barnyardgrass, bentgrass, Bermudagrass, brome grass, Cogongrass, crabgrass, creeping bentgrass, dallisgrass, fall panicum, fescue, field sandbur, foxtail, goosegrass, guineagrass, Johnsongrass, Kentucky bluegrass, kikuyugrass, lovegrass, maidencane, nimblewill, nutsedge, orchardgrass, pampas grass, perennial ryegrass, purple nutsedge, quackgrass, sandspur, smooth brome grass, sprangletop, St. Augustinegrass, tall fescue, Texas panicum, Timothy, torpedograss, vaseygrass, witchgrass, yellow nutgrass, zoysia and other grassy weeds

Brush (Tough Weeds) Unwanted Tress, Shrubs & Vines (including):

Alder, ash, (quacking) aspen, blackberry, bluegum eucalyptus, broom (French, Scotch), buckwheat, ceanothus, chamise, cherry, coyote brush, dewberry, elderberry, elm, eucalyptus, giant reed, hawthorn, hazel, honeysuckle, kudzu, locust, madrone, maple,

oak, persimmon, poison oak, poison ivy, poplar, raspberry, sage, sagebrush, salmonberry, saltcedar, sassafras, sumac, sweetgum, tan oak, thimbleberry, tree tobacco, wild rose (multiflora) willow and other tough weeds

STORAGE AND DISPOSAL *[trash can illustration]*

STORAGE: Store in original container in a safe place away from direct sunlight.

DISPOSAL: Empty Container: Do not reuse container. Put in trash. (Recycle where available.) **Partially Full Container:** Call your local waste disposal service or 1-800-CLEANUP. Never pour product down any drain.

HOW TO REFILL ROUNDUP READY-TO-USE CONTAINERS

- **24 fl oz Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 2 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **½ Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 5 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 10 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **1.33 Gallon Roundup Weed & Grass Killer₁ Ready-To-Use PNS (II):**
To empty container add 13 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **6L Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 16 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **2 Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 20 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.

PRECAUTIONARY STATEMENTS *[optional illustration]***HAZARDS TO HUMANS & DOMESTIC ANIMALS**

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

[re-entry icon] People and pets may enter treated area after spray has dried.

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing. • Call a poison control center (insert contact #)) or doctor for treatment advice.
Emergency Medical Information	
<ul style="list-style-type: none"> • Have the product container or label with you when calling a poison control center or doctor, or going for treatment. • You may contact (insert contact #) for emergency medical treatment information. • This product is identified as Roundup Weed & Grass Killer Concentrate, EPA Reg. No. 71995-26 	

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

This product is protected by U.S. Patents No. 4,405,531 and No. 5,703,015 and No. 6,063,733 and No. 6,121,199 and No. 6,121,200. Other patents pending. No license granted under any non-U.S. patent(s).

This is an end-use product. Monsanto does not intend and has not registered if for reformulation or repackaging.

[phone icon] **Questions, Comments or Medical Information**
call (insert contact #) www.roundup.com

Roundup is a trademark of Monsanto Technology LLC

©[] MONSANTO COMPANY

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 418
Columbus, OH 43216-0418
Form []
EPA Reg. No. 71995-26
EPA Est. 239-IA-3¹, 58996-MO-1^A
Superscript is first letter of lot number
Made in USA

APPENDIX 1 – Consolidated List of Label Claims
[Ordered alphabetically]

- 40% more concentrated
- 40% stronger
- 40% stronger to speed absorption to the root
- Absorbed into both broadleaf and grassy weeds
- Absorbs on contact, starts working immediately
- Also use for large jobs such as lawn renovation and vegetable and flower garden preparation
- Approved for most (many) lawn and garden uses
- Before [weed graphics] / After [weed graphics]
- Begins absorbing on contact
- Can be used around (small) fruits and vegetables
- Can be used for habitat restoration, controlling exotic vegetation, and for site preparation of wildlife food plots
- Can reseed or sod lawns 7 days after treatment
- Concentrated for extra value
- Covers up to 300 sq ft per gallon of spray
- Dead Weeds Guaranteed
- Dead Weeds Guaranteed or Your Money Back
- Does not have soil activity
- Economical
- Economical concentrate formula
- Easy to apply with an Ortho Dial 'n Spray®, hose-end, tank or (hand held) trigger sprayer
- Even if it rains – Roundup won't lose its effectiveness
- Exclusive Roundup formula
- FastAct™ (Technology)
- For control that doesn't (won't) wash away
- For general weed control - kills weeds and grasses in 2 to 4 weeks - roots and all
- Guaranteed same effective results even if it rains within hours
- Improved extra strength formula
- Improved formula, completely kills even the toughest weeds and grasses
- Improved formulation -now RainFast - fast uptake
- Kills almost all (annual and perennial) weeds, grasses and other unwanted plants
- Kills existing weeds only, no residual activity in soil
- Kills more weeds in more places.
- Kills over 100 weeds
- Kills (to) the root
- Kills the root so weeds don't come back
- Kills the roots of (both) broadleaf and grassy weeds
- Kills the weed you see and the root you don't
- Kills unwanted weeds and grasses, roots and all
- Kills weeds in flowerbeds, around trees, shrubs and fences, and on patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard

- Kills weeds, roots and all
- Lawns and gardens can be reseeded or planted soon after treatment
- Make only what you need
- Multipurpose grass and broadleaf weed control
- NEW!
- No odor
- No root. No weed. No problem.
- NOW!
- Now a shorter wait for replanting!
- Once it enters the plant, it won't wash off
- Ornamental gardens can be reseeded or planted 1 day after treatment
- Only Roundup's effectiveness (exclusive formula) won't be washed away by rain or watering 2 hours (30, 45, 60, 90 minutes; 1 hour; less than 1 hour; less than 60 minutes; less than 30 minutes) after treatment
- RainFast in hours (30, 45, 60, or 90 minutes) - enters the plant on contact
- RAIN-PROOF™
- Rainproof in two hours (30, 45, 60, 90 minutes; 1 hour; less than 1 hour; less than 60 minutes; less than 30 minutes)) (for control that won't wash away)
- (Roundup) Kills the weed you see and the root others leave behind
- Roundup kills weeds and grasses in – Patios – Driveways – Sidewalks – Gardens and other non-lawn areas
- Satisfaction guaranteed or we will gladly refund purchase price
- Satisfaction guaranteed or your money back with proof of purchase
- (See) results in 24 hours (1 day)
- Speeds absorption to the root for complete kill
- Spray weeds (Use) in flowerbeds, around trees, shrubs and around fences, and on patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard
- Starts working immediately
- Stronger
- Transorb technology speeds Roundup to the root to kill even tough weeds
- Use around fruits and vegetables
- (Use) For Brush Control
- (Use) For General Weed Control: Use along fences, paths, patios, sidewalks and driveways, around trees, shrubs, ornamental plantings, flowerbeds, and buildings, and in brick and gravel walkways.
- Use to trim and edge landscape areas.
- (Use) For Landscaping: Use to prepare areas for planting of ornamentals, trees, shrubs, desert landscapes, rock gardens, flowerbeds or similar plantings.
- Use for large jobs like garden plot preparation and lawn replacement (renovation)
- (Use) For Lawn Renovation
- (Use) For Spot Spraying: Use in and around flowerbeds, ornamental, fruit and nut trees, grapevines, shrubs, fences, driveways and walkways
- (Use) For Stumps
- (Use) For Wildlife Areas: Use to prepare areas for planting wildlife food. Exotic or undesirable plants can be controlled to allow for planting or recovery of native plant

species. Spot treatments can be made to selectively remove unwanted plants.

- (Use in) Apply with a Big Shot™ Multi-Purpose Sprayer or other tank sprayer, Ortho Dial 'n Spray® or other hose-end sprayer, or a (hand held) trigger sprayer
- Use to refill Roundup Ready-To-Use containers
- Use to prepare sites: for large plantings, for planting flowerbeds, fruit trees, ornamentals, vegetables and gardens, and for renovating lawns
- Visible effects are gradual wilting and yellowing advancing to complete browning and root destruction.
- Visible results in 2 to 4 days (hours)
- Water based formula
- (Weeds) start dying in 1 day (24 hours)
- Won't wash off
- Won't wash away
- Works only when absorbed by the foliage of weeds

[Promotional options]

Save up to \$[x] on (your) next purchase

[X] % Free (More)

Free weed guide inside

Free [] with this purchase of Roundup concentrate quart

FREE REFILL

FREE SAMPLE

SAMPLE NOT FOR SALE

Value size

APPENDIX 2 – Packaging Related Claims

NET xx fl oz (qt or gal) (xx mL or L)

6 fl oz (177 mL)

6.5 fl oz (192 mL)

8 fl oz (237 mL)

13 fl oz (384 mL)

16 fl oz (1 pt) (473 mL)

32 fl oz (1 qt) 946 mL)

40 fl oz (1.18 L)

53.7 fl oz (0.42 gal) (1.5 L)

64 fl oz (1/2 gal) (1.89 L)

128 fl oz (1 gal) (3.79 L)

[corner flap]

OPEN

Resealable Label for Directions & Precautions

PULL HERE TO OPEN LABEL

PEEL HERE

PEEL OPEN FOR USE DIRECTIONS AND FURTHER INFORMATION

PRESS TO RESEAL

[Net contents] Makes up to 'X' gallons

Makes between 'X' – 'Y' gallons

Mix with water to make 'X' gallons of spray solution

Covers up to 'Z' sq ft

Mix with water to cover up to 'Z' sq ft

 $[X = \text{net contents} \div 3]$ $[Y = \text{net contents} \div 6]$ $[Z = X * 300]$ *[13 oz PNS (II) Refill Concentrate]*

Pre-measured

Convenient

Refills (Refill for) (Roundup) Pull N' Spray (II)

Use to refill (Roundup) Pull N' Spray (II)

Refill (Roundup) Pull N' Spray (II) and save

Save money

Easy-to-pour

Refill

Makes one (1) refill for (Roundup) Pull N' Spray (II)

NEW

NOW

(Roundup) Pull N' Spray (II) Refill

Compare to the price of a new (Roundup) Pull N' Spray (II)

No mess
 No messy clean-up
 No measuring
 Easy-to-use
 Save time
 Less waste
 Treat more weeds for less money
 Treat twice as many weeds for less money
 Great (Excellent) (Outstanding) value
 Value Refill Bottle
 Pull N' Spray (II) Refill
 More economical
 Just pour
 Quick and (&) Easy
 Just pour and (&) add water
 Hassle free
 Simple
 Just pour, fill, and (&) spray

[Pint] Makes up to 5 gallons
 Makes between 2½ - 5 gallons
 Mix with water to make 5 gallons of spray solution
 Covers up to 1,500 sq ft
 Mix with water to cover up to 1,500 sq ft

[Quart] Makes up to 10 gallons
 Makes between 5 – 10 gallons
 Mix with water to make 10 gallons of spray solution
 Covers up to 3,000 sq ft
 Mix with water to cover up to 3,000 sq ft

[0.42 Gallon] Makes up to 18 gallons
 Makes between 9 – 18 gallons
 Mix with water to make 18 gallons of spray solution
 Covers up to 5,400 sq ft
 Mix with water to cover up to 5,400 sq ft

[Half Gallon] Makes up to 21 gallons
 Makes between 10 – 21 gallons
 Mix with water to make 21 gallons of spray solution
 Covers up to 6,300 sq ft
 Mix with water to cover up to 6,300 sq ft

[Gallon] Makes up to 42 gallons
 Makes between 21 – 42 gallons
 Mix with water to make 42 gallons of spray solution

Covers up to 12,600 sq ft

Mix with water to cover up to 12,600 sq ft

New! Larger size, covers up to ['Z'] sq ft

EPA Form 8270-12 (2-78)



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☒ Amendment
☐ Other

OPP Identifier Number

295237

Application for Pesticide – Section I

1. Company/Product Number Monsanto Co./ EPA Registration 71995-26	2. EPA Product Manager James A. Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Monsanto Co./ Roundup Weed & Grass Killer Concentrate	PM # 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company 600 13 th St., N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section – II

<input checked="" type="checkbox"/> Amendment – Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated
<input type="checkbox"/> Resubmission in response to Agency letter dated	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification – Explain below.	<input type="checkbox"/> Other – Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
Submission of Master Label Amendment for EPA Registration No. 71995-26

Section – III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	
* Certification must be submitted				<input type="checkbox"/> Plastic	
	If "Yes" Unit Packaging wgt.	No. per Container	If "Yes" Package wgt.	No. per Container	<input type="checkbox"/> Glass
					<input type="checkbox"/> Paper
					<input type="checkbox"/> Other (Specify)
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____					

Section – IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Marsha C. Gray, Ph.D.		Title Registration Manager		Telephone No. (Include Area Code) (202) 383-2878	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature Rhonda M. Mannion/ks		3. Title Registration Manager			
4. Typed Name Rhonda M. Mannion		5. Date June 25, 2002			

A

MONSANTO



B

MONSANTO COMPANY

600 13TH STREET, N.W.

SUITE 660

WASHINGTON, D.C. 20005

<http://www.monsanto.com>

June 25, 2002

Office of Pesticide Programs (AMEND)
Document Processing Center (7504C)
U.S. Environmental Protection Agency
Crystal Mall #2, Room 266A
1921 Jefferson Davis Highway
Arlington, VA 22202

Attention: Mr. James A. Tompkins
Team Leader (25)

Subject: Roundup Weed & Grass Killer Concentrate
(EPA Reg. No. 71995-26)
Submission of Master Label Amendment

Dear Mr. Tompkins,

Monsanto is submitting (5) copies of the revised Roundup Weed & Grass Killer Concentrate master label, (EPA Reg. No. 71995-26). Revisions to the label text are highlighted, and based on the current approved label dated August 2, 2001.

The following documents are enclosed with this letter:

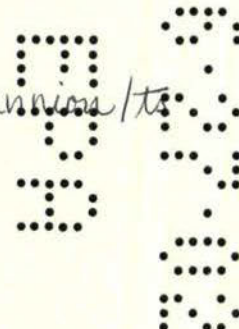
- Application for Pesticide (form 8570-1)
- Five (5) copies of the revised master label - unmarked
- One (1) copy of the revised master label - marked highlighting revisions to the current approved label

Should you require any additional information or have any questions regarding this label amendment, please contact Dr. Marsha Gray at our Washington office (202)783-2460 or me directly at (314)694-8785 rmmann@Monsanto.com.

Sincerely,

Rhonda M. Mannion

Rhonda M. Mannion



cc: V. Walters/EPA
M. Gray/DC office
D. Fee-White/A2NC
B. Kliewer/C3ND
File Copy



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

23A4-3

Application for Pesticide - Section I

1. Company/Product Number 71995-26	2. EPA Product Manager Mr. Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Roundup Weed & Grass Killer Concentrate	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company 600 13th Street N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

NOTIFICATION

Section - II

JAN 11 2002

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Submission of final printed labels.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____	
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Dr. Marsha Gray	Title Registration Manager	Telephone No. (Include Area Code) (202) 783-2460
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment, or both under applicable law.		Date Application Received (Stamped)
2. Signature Rhonda M. Mannion	3. Title Registration Manager	
4. Typed Name Rhonda M. Mannion	5. Date 19 December 2001	

Front PPN 2117623-43

25% MORE FREE

STRONGER!
DEAD WEEDS
GUARANTEED!

Roundup

WEED & GRASS KILLER

CONCENTRATE

**NO ROOT.
NO WEED.
NO PROBLEM.™**

PPN 2117623-43 (014102)



Active Ingredient
Glyphosate, isopropylamine salt 25.0%
Other Ingredients 75.0%

**KEEP OUT OF
REACH OF CHILDREN**

See back panel booklet for
additional precautionary statements.

CAUTION

NET 40 FL OZ (1 QT 8 FL OZ)

NOTIFICATION

JAN 11 2002

Back PPN 2117623-44



**Weed & Grass Killer
Concentrate**

OPEN
Resealable Label
for Directions &
Precautions

RAIN-PROOF IN TWO HOURS
FOR CONTROL THAT WON'T WASH AWAY

PRODUCT FACTS

Makes up to 13 Gallons

Treats up to 4,000 sq ft (approx. size of 1-3/4 tennis courts)

**KILLS
WEEDS**



ALL TYPES OF WEEDS & GRASSES

**WHERE
TO USE**

- ✓ On patios, walkways, driveways, gravel or mulch beds
- ✓ Around fruits, vegetables, flowers, shrubs or trees
- ✓ Along fences
- ✓ In large areas – For lawn replacement
– For garden plot preparation

**AMOUNT
TO USE**

For Best Results –

6 fl oz (12 Tbs) per gallon of water



Questions, Comments or Medical Information:
Call 1-888-ROUNDUP

www.roundup.com



PRESS TO RESEAL

For easy to kill weeds such as seedling add 3 fl oz (6 Tbs)
to 1 gallon of water.

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 1750
Columbus, OH 43216
PPN 2117623-44 (031301)
EPA Reg. No. 71995-26
EPA Est. 239-IA-31, 58996-MO-1A
Superscript is first letter of lot number
Made in USA



0 70183 50050 5
1101

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS

Tank Sprayer (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- Add 6 fl oz (12 Tbs) to 1 gallon of water.
- Spot treat or spray evenly over 300 sq ft.

Hose-end Sprayer

For large areas consider using the **ORTHO® Dial 'n Spray®**

- Set dial to 5-1/3 or 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. **DO NOT** add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

For easy to kill weeds such as seedlings add 3 fl oz (6 Tbs) to 1 gallon of water. Do not apply with a galvanized or unlined steel (except stainless steel) sprayer or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

How To Apply

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a piece of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

Important: Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

1.

When To Apply

- Apply when weeds are actively growing. Use anytime weeds and grasses are actively growing.
- For best results, apply during warm, sunny weather (above 60°F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- RAIN-PROOF: Rain or watering 2 hours after application will not wash away effectiveness.
- If used to control weeds around fruit or nut trees, caneberries, or grapevines allow 17 days before harvesting.

Additional Tips

To Kill Vines

- If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 ft and spray vines thoroughly.
- If vines are climbing shrubs, or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a piece of cardboard or plastic.

To Kill Stumps

- Cut living stump close to ground.
- Drive 4 to 5 holes into freshly cut stump.
- Immediately pour undiluted product into holes.

For Lawn Replacement

Use Roundup to kill lawn and weeds before planting new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

When To Replant

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:

Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato, radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.

Continued: 2

PRESS TO RESEAL

BACK

PPN 2117623-44

When To Replant Continued:

- The following fruits, vegetables and herbs may be planted **3 days after** application:
Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all), pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Lawn grasses may be planted **7 days after** application.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.

How It Works

Roundup enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found in plants. Any product not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

Satisfaction Guaranteed or your money back with proof of purchase.



Weed & Grass Killer Concentrate

STORAGE AND DISPOSAL

STORAGE: Store in original container in a safe place.

DISPOSAL: **Empty Container:** Do not reuse container. Put in trash. (Recycle where available.) **Partially Full Container:** Call your local waste disposal service or 1-800-CLEANUP. Never pour product down any drain.

PRECAUTIONARY STATEMENTS**HAZARDS TO HUMANS & DOMESTIC ANIMALS**

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

People and pets may enter treated areas after spray has dried.

FIRST AID

If in eyes	• Hold eye open and rinse slowly and gently for 15-20 minutes.
	• Remove contact lenses, if present, after first 5 minutes, then continue rinsing.
	• Call a poison control center 1-888-768-6387 or doctor for treatment advice.

Emergency Medical Information:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-888-768-6387 for emergency medical treatment information.

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.



Questions, Comments or Medical Information:
Call 1-888-ROUNDUP www.roundup.com

This product is protected by U.S. Patents No. 5,703,015 and No. 5,683,958 and No. 6,063,733 and No. 6,121,199 and No. 6,121,200. No license granted under any non-U.S. patent(s).

This is an end-use product. Monsanto does not intend and has not registered it for reformulation or repackaging. Roundup is a trademark of Monsanto Technology LLC.
© 2001 MONSANTO COMPANY

Manufactured for **Monsanto Company**, Lawn & Garden Products

P.O. Box 1750 Columbus, OH 43216

PPN 2117623-44 (031301)

EPA Reg. No. 71995-26 EPA Est. 239-1A-3¹, 58996-MO-1^A

Superscript is first letter of lot number Made in USA

Front PPN 2117623-43

25% MORE FREE

**STRONGER!
DEAD WEEDS
GUARANTEED!**

Roundup
WEED & GRASS KILLER

CONCENTRATE

**NO ROOT.
NO WEED.
NO PROBLEM.™**

PPN 2117623-43 (014102)



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Other Ingredients 75.0%

**KEEP OUT OF
REACH OF CHILDREN**

See back panel booklet for
additional precautionary statements. **CAUTION**

NET 40 FL OZ (1 QT 8 FL OZ)

NOTIFICATION

JAN 11 2002



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Continued: 2

When To Replant Continued:

- The following fruits, vegetables and herbs may be planted **3 days after** application:
Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all), pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
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Satisfaction Guaranteed or your money back with proof of purchase.



Weed & Grass Killer Concentrate

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CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

People and pets may enter treated areas after spray has dried.

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing. • Call a poison control center 1-888-768-6387 or doctor for treatment advice.
Emergency Medical Information:	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-888-768-6387 for emergency medical treatment information.	

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water.

Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.



Questions, Comments or Medical Information:
Call 1-888-ROUNDUP www.roundup.com

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© 2001 MONSANTO COMPANY

Manufactured for **Monsanto Company**, Lawn & Garden Products

P.O. Box 1750 Columbus, OH 43216

PPN 21176Z3-44 (031301)

EPA Reg. No. 71995-26 EPA Est. 239-IA-31, 58996-MO-1A

Superscript is first letter of lot number Made in USA

Front PPN 2117623-43

25% MORE FREE

STRONGER!
DEAD WEEDS
GUARANTEED!

Roundup
WEED & GRASS KILLER
CONCENTRATE

**NO ROOT.
NO WEED.
NO PROBLEM.™**

PPN 2117623-43 (014102)



Active Ingredient
Glyphosate, isopropylamine salt 25.0%
Other Ingredients 75.0%

**KEEP OUT OF
REACH OF CHILDREN**

See back panel booklet for
additional precautionary statements.

CAUTION

NET 40 FL OZ (1 QT 8 FL OZ)

NOTIFICATION

JAN 1 1 2002

BACK PPN 2117623-44



**Weed & Grass Killer
Concentrate**

OPEN
Resealable Label
for Directions &
Precautions

RAIN-PROOF™ IN TWO HOURS
FOR CONTROL THAT WON'T WASH AWAY

PRODUCT FACTS

Makes up to 13 Gallons

Treats up to 4,000 sq ft (approx. size of 1-3/4 tennis courts)

**KILLS
WEEDS**



ALL TYPES OF WEEDS & GRASSES

**WHERE
TO USE**

- ✓ On patios, walkways, driveways, gravel or mulch beds
- ✓ Around fruits, vegetables, flowers, shrubs or trees
- ✓ Along fences
- ✓ In large areas – For lawn replacement
– For garden plot preparation

**AMOUNT
TO USE**

For Best Results –

6 fl oz (12 Tbs) per gallon of water



Questions, Comments or Medical Information:
Call 1-888-ROUNDUP

www.roundup.com



PRESS TO RESEAL

For easy to kill weeds such as seedling add 3 fl oz (6 Tbs)
to 1 gallon of water.

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 1750
Columbus, OH 43216
PPN 2117623-44 (031301)
EPA Reg. No. 71995-26
EPA Est. 239-1A-3¹, 58996-MO-1^A
Superscript is first letter of lot number
Made in USA



0 70183 50050 5
1101

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS

Tank Sprayer (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- Add 6 fl oz (12 Tbs) to 1 gallon of water.
- Spot treat or spray evenly over 300 sq ft.

Hose-end Sprayer

For large areas consider using the **ORTHO® Dial 'n Spray®**

- Set dial to 5-1/3 or 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. **DO NOT** add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

For easy to kill weeds such as seedlings add 3 fl oz (6 Tbs) to 1 gallon of water. Do not apply with a galvanized or unlined steel (except stainless steel) sprayer or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

How To Apply

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a piece of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

Important: Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

When To Apply

- Apply when weeds are actively growing. Use anytime weeds and grasses are actively growing.
- For best results, apply during warm, sunny weather (above 60°F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- **RAIN-PROOF:** Rain or watering 2 hours after application will not wash away effectiveness.
- If used to control weeds around fruit or nut trees, caneberries, or grapevines allow 17 days before harvesting.

Additional Tips

To Kill Vines

- If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 ft and spray vines thoroughly.
- If vines are climbing shrubs, or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a piece of cardboard or plastic.

To Kill Stumps

- Cut living stump close to ground.
- Drive 4 to 5 holes into freshly cut stump.
- Immediately pour undiluted product into holes.

For Lawn Replacement

Use Roundup to kill lawn and weeds before planting new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

When To Replant

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:

Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato, radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.

Continued: 2

PRESS TO RESEAL

When To Replant Continued:

- The following fruits, vegetables and herbs may be planted **3 days after** application:
Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all), pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Lawn grasses may be planted **7 days after** application.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.

How It Works

Roundup enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found in plants. Any product not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

Satisfaction Guaranteed or your money back with proof of purchase.



Weed & Grass Killer Concentrate

STORAGE AND DISPOSAL

STORAGE: Store in original container in a safe place.

DISPOSAL: **Empty Container:** Do not reuse container. Put in trash. (Recycle where available.) **Partially Full Container:** Call your local waste disposal service or 1-800-CLEANUP. Never pour product down any drain.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

People and pets may enter treated areas after spray has dried.

FIRST AID

- | | |
|-------------------|---|
| If in eyes | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing. • Call a poison control center 1-888-768-6387 or doctor for treatment advice. |
|-------------------|---|

Emergency Medical Information:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-888-768-6387 for emergency medical treatment information.

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water.

Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.



Questions, Comments or Medical Information:
Call 1-888-ROUNDUP www.roundup.com

This product is protected by U.S. Patents No. 5,703,015 and No. 5,683,958 and No. 6,063,733 and No. 6,121,199 and No. 6,121,200. No license granted under any non-U.S. patent(s).

This is an end-use product. Monsanto does not intend and has not registered it for reformulation or repackaging. Roundup is a trademark of Monsanto Technology LLC.

© 2001 MONSANTO COMPANY

Manufactured for **Monsanto Company**, Lawn & Garden Products

P.O. Box 1750 Columbus, OH 43216

PPN 2117623-44 (031301)

EPA Reg. No. 71995-26 EPA Est. 239-IA-3¹, 58996-MO-1^A

Superscript is first letter of lot number

Made in USA

PRESS TO RESEAL

MONSANTO



MONSANTO COMPANY
600 13TH STREET, N.W.
SUITE 660
WASHINGTON, D.C. 20005
PHONE (202) 783-2460
FAX (202) 783-2468
<http://www.monsanto.com>

19 December 2001

Hand Delivered

Document Processing Center (NOTIF)
Office of Pesticide Programs
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2,
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

NOTIFICATION

JAN 11 2002

Attention: Mr. Jim Tompkins
Product Manager (Team 25)

**Subject: Roundup® Weed & Grass Killer Concentrate (EPA Reg. No. 71995-26).
Submission of Final Printed Labels and Notification of Label Text Changes.**

Dear Mr. Tompkins:

Monsanto is submitting three (3) copies of the Roundup® Weed & Grass Killer Concentrate final printed label (print plate nos. 21176Z3-43 and 21176Z3-44). The "NEW" claim has been removed from the front label and the back label is the same as the EPA stamped label dated 2 August 2001 with the following exceptions:

- The sentence "If local laws permit, put partially full container in trash." has been removed from the *Disposal* section to be consistent with PR Notice 2001-6.

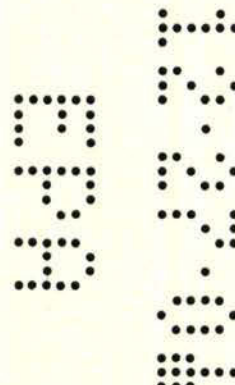
Should you have any questions, please contact Dr. Marsha Gray at our Washington office (202) 783-2460 or me directly at (314) 694-8785 or rmmann@monsanto.com.

Sincerely,

Rhonda M. Mannion
Registration Manager

cc: Marsha Gray / DC Office
File copy

Enclosure





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

AUG - 2 2001

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ms. Rhonda M. Mannion
Monsanto Company
600 13th Street, NW, Suite 660
Washington, DC 20005

Dear Ms. Mannion:

Subject: Roundup Weed & Grass Killer Concentrate (Add Refill Instructions for All Ready-to-Use Containers)
EPA Registration No. 71995-26
Your Application Dated April 4, 2001

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable. The amended labeling supercedes all previously accepted ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

James A. Tompkins
James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

[Editorial Notes: Bracketed text [] is for internal use or serves as a 'place holder' for graphics. Parenthetical text () denotes optional wording.]

[Refer to APPENDIX 1 for consolidated list of label claims.]

[Refer to APPENDIX 2 for packaging related claims/instructions]

Roundup® Weed & Grass Killer Concentrate

Alternate Brand Names: Roundup Pull N' Spray Refill Concentrate
Roundup Pull N' Spray II Refill Concentrate

Active Ingredient

Glyphosate, isopropylamine salt 25.0 %

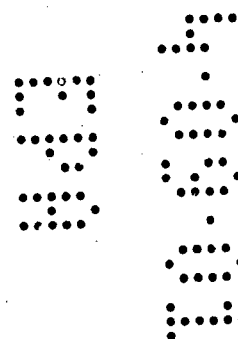
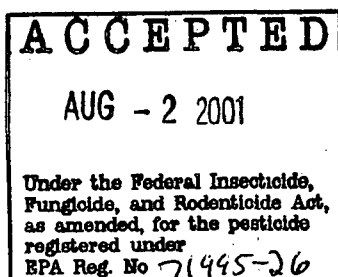
Other Ingredients 75.0 %

KEEP OUT OF REACH OF CHILDREN

CAUTION

See back panel booklet for additional precautionary statements.
(Read precautions and directions on back label.)

NET [xxx]



Product Facts

Treats up to xx sq ft (approx. size of XX tennis courts)

[When calculating coverage, one gallon treats 300 sq ft and a tennis court is 2,106 sq ft.]

KILLS [Illustrate grassy, broadleaf and woody weeds]

WEEDS ALL TYPES OF WEEDS & GRASSES

WHERE TO USE

- On patios, walkways, driveways, gravel or mulch beds
- Around fruits, vegetables, flowers, shrubs or trees
- Along fences
- In large areas - For lawn replacement
- For garden plot preparation

AMOUNT For best results

TO USE • 6 fl oz (12 Tbs) per gallon of water for established or tough weeds

[For Roundup Pull N' Spray (II) Refill Concentrate]

• To refill Roundup Pull N' Spray (II)

Empty entire contents (13 oz) into empty 1.33 gallon Roundup Pull N' Spray (II) container and fill with water.

[phone icon] **Questions, Comments or Medical Information**

call 1-800-225-2883

www.roundup.com

(call 1-888-Roundup)

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS

[optional tank sprayer illustration]

Tank Sprayer (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- For easy to kill weeds such as seedlings, add 3 fl oz (6 Tbs) to 1 gallon of water
- (For tough established weeds / For best results,) add 6 fl oz (12 Tbs) to 1 gallon of water
- Spot treat or spray evenly over 300 sq ft.

[optional DNS illustration]**Hose-End Sprayer**

For large areas consider using the Ortho Dial 'n Spray®

- Set dial to 5 1/3 or 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. DO NOT add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

[optional PNS (II) illustration]**Roundup Pull N' Spray (II)**

- Add entire contents of 13 fl oz Roundup Pull N' Spray (II) Refill Concentrate to the empty Roundup Pull N' Spray (II) container and fill with water.

OR

- Add 13 fl oz of Roundup Concentrate to the empty Roundup Pull N' Spray (II) container and fill with water.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

Do not (mix, store or) apply with (in) a galvanized or unlined steel (except stainless steel) sprayer, or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

HOW TO APPLY [optional illustration]

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a sheet (piece) of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

IMPORTANT

Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

WHEN TO APPLY [optional illustration]

- Apply when weeds are actively growing. Use anytime weeds and grasses are

actively growing.

- For best results, apply during warm, sunny weather (above 60° F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- (RAIN-PROOF:) Rain or watering 2 hours after application will not wash away effectiveness.
- Apply when weeds are small and before seeds form. Established (Hard to kill) weeds may require a repeat application.

ADDITIONAL TIPS <i>[optional illustration]</i>

- **To Kill Vines**

- If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 feet and spray vines thoroughly.
- If vines are climbing shrubs or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a sheet (piece) of cardboard or plastic.

- **To Kill Stumps**

- Cut living stump close to ground.
- Drive 4 to 5 holes into freshly cut stump.
- Immediately pour undiluted product into holes.

- **For Lawn Replacement**

Use Roundup to kill a (an old) lawn and (its) weeds before planting (a) new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

[Alternate text]

- Wait 7 days for weeds and lawn to die. Repeat if necessary.
- Rake or till to prepare area for planting seed or sod.

- **Kudzu**

For best results, apply in mid to late summer when vines are mature and actively growing.

- **Wild Blackberry**

Spray anytime plants are actively growing. Dead canes should be cut down and removed. Reapplication is often required to kill deep roots.

- **Poison Ivy & Poison Oak**

Contact with these plants anytime of the year can cause an allergic reaction. Spray anytime plants are actively growing, but at least 4 weeks before the first killing frost

in the fall. Reapply, if new growth appears. Handle dead plants with rubber gloves. Dispose of plants and rubber gloves in tightly sealed garbage bags.

- **For Flowerbed & Garden Preparation**

Use Roundup to kill weeds, grasses and brush before planting flowers, fruits, vegetables or herbs.

- If soil is dry, water before application and 2 to 3 days after application.
- Apply evenly over treatment area.
- Wait the number of days indicated below before planting.

WHEN TO REPLANT <i>[optional illustration]</i>

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:
Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato, radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.
- The following fruits, vegetables and herbs may be planted **3 days after** application:
Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all), pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.
- Lawn grasses may be planted **7 days after** application.

WHEN TO HARVEST <i>[optional illustration]</i>

If used to control weeds around fruits or nuts, allow the following number of days before harvesting:

- Citrus (citron, grapefruit, lemon, lime, mandarin, orange, tangelo and tangerine) – **1 day**.
- Nuts (almond, beechnut, cashew, chestnut, hazelnut, pecan, pistachio and walnut) – **3 days**.
- Apple, avocado, banana (plantains), berries (except cranberries), dates, figs, grapes, kiwi fruit, loquat, passion fruit, pear, persimmon, pomegranate and quince – **14 days**.
- Apricot, cherries, nectarine, olives, peach, plum and prunes – **17 days**.

(OR)

- If used to control weeds around fruit or nut trees, caneberries or grapevines, allow 17 days before harvesting.

HOW IT WORKS *[optional illustration]*

Roundup enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found (only) in plants. Any product (Roundup) not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

KILLS ALL TYPES OF WEEDS & GRASSES *[optional illustration]*

Weeds (including): Artichoke thistle, beggarweed, black medic, blue mustard, blue toadflax, brassbuttons, broadleaf plantain, burclover, buttercup, Canada thistle, cattail, chickweed, cocklebur, common groundsel, common mullein, common plantain, common ragweed, creeping beggarweed, creeping-charlie, curly dock, dandelion, dog fennel, evening primrose, false dandelion, fiddleneck, field bindweed (wild morningglory), field pennycress, filaree, Florida pusley, garden spurge, henbit, horsenettle, horseradish, horseweed/ marestalk, iceplant, knapweed, knotweed, lambsquarters, lantana, little bittercress, London rocket, mallow, mayweed, milkweed, mouseear chickweed, narrowleaf (buckhorn) plantain, nightshade (silverleaf), oldenlandia, oxalis, Pennsylvania smartweed, pennywort, poison hemlock, prickly lettuce, primrose, prostrate spurge, puncturevine, ragweed, red clover, redroot pigweed, shepherdspurge, smooth catsear, smooth pigweed, sowthistle, spotted spurge, tansy, ragwort, tansymustard, teaweed, trumpetcreeper, tumble mustard, Virginia creeper, white clover, whitetop, wild barley, wild mustard, wild oats, wild sweet potato, yellow starthistle, and other broadleaf weeds

Grasses (including): Annual bluegrass, annual ryegrass, bahiagrass, barnyardgrass, bentgrass, Bermudagrass, brome grass, Cogongrass, crabgrass, creeping bentgrass, dallisgrass, fall panicum, fescue, field sandbur, foxtail, goosegrass, guineagrass, Johnsongrass, Kentucky bluegrass, kikuyugrass, lovegrass, maidencane, nimblewill, nutsedge, orchardgrass, pampas grass, perennial ryegrass, purple nutsedge, quackgrass, sandspur, smooth brome grass, sprangletop, St. Augustinegrass, tall fescue, Texas panicum, Timothy, torpedograss, vaseygrass, witchgrass, yellow nutgrass, zoysia and other grassy weeds

Brush (Tough Weeds) Unwanted Tress, Shrubs & Vines (including):

Alder, ash, (quacking) aspen, blackberry, bluegum eucalyptus, broom (French, Scotch), buckwheat, ceanothus, chamise, cherry, coyote brush, dewberry, elderberry, elm, eucalyptus, giant reed, hawthorn, hazel, honeysuckle, kudzu, locust, madrone, maple, oak, persimmon, poison oak, poison ivy, poplar, raspberry, sage, sagebrush, salmonberry, saltcedar, sassafras, sumac, sweetgum, tan oak, thimbleberry, tree tobacco, wild rose (multiflora) willow and other tough weeds

[re-entry icon] People and pets may enter treated area after spray has dried.

STORAGE AND DISPOSAL [trash can illustration]

STORAGE: Store in original container in a safe place.

DISPOSAL: Empty Container: Do not reuse container. Put in trash. (Recycle where available.) **Partially Full Container:** Call your local waste disposal service (or 1-800-CLEANUP). If local laws permit, put partially full container in trash. Never pour product down any drain.

HOW TO REFILL ROUNDUP READY-TO-USE CONTAINERS

- **24 fl oz Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 2 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **½ Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 5 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 10 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **1.33 Gallon Roundup PNS (II):**
To empty container add 13 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **6L Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 16 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **2 Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 20 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.

PRECAUTIONARY STATEMENTS [optional illustration]**HAZARDS TO HUMANS & DOMESTIC ANIMALS**

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

FIRST AID	
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently for 15-20 minutes.• Remove contact lenses, if present, after first 5 minutes, then continue rinsing.• Call a poison control center (1-800-225-2883 or 1-888-768-6387 or 1-888-Roundup) or doctor for treatment advice.
Emergency Medical Information	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-225-2883 (1-888-768-6387 or 1-888-Roundup) for emergency medical treatment information.	

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

This product is protected by U.S. Patents No. 4,405,531 and No. 5,703,015 and No. 6,063,733 and No. 6,121,199 and No. 6,121,200. Other patents pending. No license granted under any non-U.S. patent(s).

This is an end-use product. Monsanto does not intend and has not registered if for reformulation or repackaging.

[phone icon] **Questions, Comments or Medical Information**
call 1-800-225-2883 www.roundup.com
(call 1-888-Roundup)

Roundup is a trademark of Monsanto Company

©[] MONSANTO COMPANY

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 1750
Columbus, OH 43216
Form []
EPA Reg. No. 71995-26
EPA Est. 239-IA-3¹, 58996-MO-1^A
Superscript is first letter of lot number
Made in USA

APPENDIX 1 – Consolidated List of Label Claims*[Ordered alphabetically]*

- 40% more concentrated
- 40% stronger
- 40% stronger to speed absorption to the root
- Absorbed into both broadleaf and grassy weeds
- Absorbs on contact, starts working immediately
- Also use for large jobs such as lawn renovation and vegetable and flower garden preparation
- Approved for most (many) lawn and garden uses
- Before [*weed graphics*] / After [*weed graphics*]
- Begins absorbing on contact
- Can be used around (small) fruits and vegetables
- Can be used for habitat restoration, controlling exotic vegetation, and for site preparation of wildlife food plots
- Can reseed or sod lawns 7 days after treatment
- Concentrated for extra value
- Covers up to 300 sq ft per gallon of spray
- Dead Weeds Guaranteed
- Dead Weeds Guaranteed or Your Money Back
- Does not have soil activity
- Economical
- Economical concentrate formula
- Easy to apply with an Ortho Dial 'n Spray®, hose-end, tank or (hand held) trigger sprayer
- Even if it rains – Roundup won't lose its effectiveness
- Exclusive Roundup formula
- For control that doesn't (won't) wash away
- For general weed control - kills weeds and grasses in 2 to 4 weeks - roots and all
- Guaranteed same effective results even if it rains within hours
- Improved extra strength formula
- Improved formula, completely kills even the toughest weeds and grasses
- Improved formulation -now RainFast - fast uptake
- Kills almost all (annual and perennial) weeds, grasses and other unwanted plants
- Kills existing weeds only, no residual activity in soil
- Kills more weeds in more places.
- Kills over 100 weeds
- Kills (to) the root
- Kills the root so weeds don't come back
- Kills the roots of (both) broadleaf and grassy weeds
- Kills the weed you see and the root you don't
- Kills unwanted weeds and grasses, roots and all
- Kills weeds in flowerbeds, around trees, shrubs and fences, and on patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard
- Kills weeds, roots and all

- Lawns and gardens can be reseeded or planted soon after treatment
- Make only what you need
- Multipurpose grass and broadleaf weed control
- NEW!
- No odor
- No root. No weed. No problem.
- NOW!
- Now a shorter wait for replanting!
- Once it enters the plant, it won't wash off
- Ornamental gardens can be reseeded or planted 1 day after treatment
- RainFast in hours - enters the plant on contact
- RAIN-PROOF™
- RAIN-PROOF™ in two hours
- (Roundup) Kills the weed you see and the root others leave behind
- Roundup kills weeds and grasses in – Patios – Driveways – Sidewalks – Gardens and other non-lawn areas
- Satisfaction guaranteed or we will gladly refund purchase price
- Satisfaction guaranteed or your money back with proof of purchase
- Speeds absorption to the root for complete kill
- Spray weeds (Use) in flowerbeds, around trees, shrubs and around fences, and on patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard
- Starts working immediately
- Stronger
- Transorb technology speeds Roundup to the root to kill even tough weeds
- Ultra concentrated formula, 40% more weed killing power
- Ultra formula
- Use around fruits and vegetables
- (Use) For Brush Control
- (Use) For General Weed Control: Use along fences, paths, patios, sidewalks and driveways, around trees, shrubs, ornamental plantings, flowerbeds, and buildings, and in brick and gravel walkways.
- Use to trim and edge landscape areas.
- (Use) For Landscaping: Use to prepare areas for planting of ornamentals, trees, shrubs, desert landscapes, rock gardens, flowerbeds or similar plantings.
- Use for large jobs like garden plot preparation and lawn replacement (renovation)
- (Use) For Lawn Renovation
- (Use) For Spot Spraying: Use in and around flowerbeds, ornamental, fruit and nut trees, grapevines, shrubs, fences, driveways and walkways
- (Use) For Stumps
- (Use) For Wildlife Areas: Use to prepare areas for planting wildlife food. Exotic or undesirable plants can be controlled to allow for planting or recovery of native plant species. Spot treatments can be made to selectively remove unwanted plants.
- (Use in) Apply with a Big Shot™ Multi-Purpose Sprayer or other tank sprayer, Ortho Dial 'n Spray® or other hose-end sprayer, or a (hand held) trigger sprayer
- Use to refill Roundup Ready-To-Use containers

- Use to prepare sites: for large plantings, for planting flowerbeds, fruit trees, ornamentals, vegetables and gardens, and for renovating lawns
- Visible effects are gradual wilting and yellowing advancing to complete browning and root destruction.
- Visible results in 2 to 4 days
- Water based formula
- Won't wash off
- Won't wash away
- Works first time, every time
- Works only when absorbed by the foliage of weeds
- *[Promotional options]*
- Save up to \$[x] on (your) next purchase
- Free weed guide inside
- Free [] with this purchase of Roundup concentrate quart
- FREE REFILL
- FREE SAMPLE
- SAMPLE NOT FOR SALE

APPENDIX 2 – Packaging Related Claims

NET xx fl oz (qt or gal) (xx mL or L)
6 fl oz (177 mL)
16 fl oz (1 pt) (473 mL)
32 fl oz (1 qt) 946 mL)
53.7 fl oz (0.42 gal) (1.5 L)
64 fl oz (1/2 gal) (1.89 L)
128 fl oz (1 gal) (3.79 L)

[corner flap]

OPEN

Resealable Label for Directions & Precautions

PULL HERE TO OPEN LABEL

PEEL HERE

PEEL OPEN FOR USE DIRECTIONS AND FURTHER INFORMATION

PRESS TO RESEAL

[Net contents] Makes up to 'X' gallons

Makes between 'X' – 'Y' gallons

Mix with water to make 'X' gallons of spray solution

Covers up to 'Z' sq ft

Mix with water to cover up to 'Z' sq ft

[$X = \text{net contents} \div 3$]

[$Y = \text{net contents} \div 6$]

[$Z = X * 300$]

[13 oz PNS (II) Refill Concentrate]

Pre-measured

Convenient

Refills (Refill for) (Roundup) Pull N' Spray (II)

Use to refill (Roundup) Pull N' Spray (II)

Refill (Roundup) Pull N' Spray (II) and save

Save money

Easy-to-pour

Refill

Makes one (1) refill for (Roundup) Pull N' Spray (II)

NEW

NOW

(Roundup) Pull N' Spray (II) Refill

Compare to the price of a new (Roundup) Pull N' Spray (II)

No mess

No messy clean-up

No measuring

Easy-to-use

Save time
Less waste
Treat more weeds for less money
Treat twice as many weeds for less money
Great (Excellent) (Outstanding) value
Value Refill Bottle
Pull N' Spray (II) Refill
More economical
Just pour
Quick and (&) Easy
Just pour and (&) add water
Hassle free
Simple
Just pour, fill, and (&) spray

[Pint] Makes up to 5 gallons
Makes between 2½ - 5 gallons
Mix with water to make 5 gallons of spray solution
Covers up to 1,500 sq ft
Mix with water to cover up to 1,500 sq ft

[Quart] Makes up to 10 gallons
Makes between 5 - 10 gallons
Mix with water to make 10 gallons of spray solution
Covers up to 3,000 sq ft
Mix with water to cover up to 3,000 sq ft

[0.42 Gallon] Makes up to 18 gallons
Makes between 9 - 18 gallons
Mix with water to make 18 gallons of spray solution
Covers up to 5,400 sq ft
Mix with water to cover up to 5,400 sq ft

[Half Gallon] Makes up to 21 gallons
Makes between 10 - 21 gallons
Mix with water to make 21 gallons of spray solution
Covers up to 6,300 sq ft
Mix with water to cover up to 6,300 sq ft

[Gallon] Makes up to 42 gallons
Makes between 21 - 42 gallons
Mix with water to make 42 gallons of spray solution
Covers up to 12,600 sq ft
Mix with water to cover up to 12,600 sq ft

| New! Larger size, covers up to ['Z'] sq ft

DDA Form 4370-1 2 (2-78)



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☒ Amendment
☐ Other

OPP Identifier Number

284887

Application for Pesticide - Section I

1. Company/Product Number 71995-26	2. EPA Product Manager Mr. Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Roundup Weed & Grass Killer Concentrate	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company 600 13th Street N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input checked="" type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below. 4/20/01

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Submission of revised master label.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	
* Certification must be submitted				<input type="checkbox"/> Plastic	
	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	<input type="checkbox"/> Glass	
			No. per container	<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Dr. Marsha Gray		Title Registration Manager		Telephone No. (Include Area Code) (202) 783-2460	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment of both under applicable law.					6. Date Application Received (Stamped)
2. Signature Rhonda M Mann		3. Title Registration Manager			
4. Typed Name Rhonda M. Mannion		5. Date 4 April 2001			

MONSANTO

Food • Health • Hope™



MONSANTO COMPANY
600 13TH STREET, N.W.
SUITE 660
WASHINGTON, D.C. 20005
TEL: (202) 783-2460
FAX: (202) 783-2468

April 4, 2001

Hand Delivered

Document Processing Center (AMEND)
Office of Pesticide Programs
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2,
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

Attention: Mr. Dan Rosenblatt
Acting Product Manager (Team 25)

Subject: **Roundup Weed & Grass Killer₁ Ready-To-Use (EPA Reg. No. 71995-23),
Roundup Weed & Grass Killer Concentrate (EPA Reg. No. 71995-26), ✓
Roundup Weed & Grass Killer Super Concentrate (EPA Reg. No. 71995-25),
Submission of Revised Master Labels.**

Dear Mr. Tompkins:

Monsanto is herein submitting revised master labeling for Roundup Weed & Grass Killer₁ Ready-To-Use (Reg. No. 71995-23), Roundup Weed & Grass Killer Concentrate (Reg. No. 71995-26), and Roundup Weed & Grass Killer Super Concentrate (Reg. No. 71995-25).

The Roundup Weed & Grass Killer₁ Ready-To-Use (71995-23) master label is being revised to incorporate new packaging related instructions and claims for the redesigned Pull N' Spray package (also referred to as PNS II) and for a new foaming package. Refill instructions for PNS II have also been added per the Agency's acceptance, as documented in 14 February 2001 letter to Paula Bodey of The Scotts Company. An additional modification is being made to the *When To Harvest* section allowing for the option to specify individual intervals (current text) or to use the blanket interval of 21 days which is currently approved under the Reg. No. 71995-8.

The Roundup Weed & Grass Killer Concentrate (71995-26) and Roundup Weed & Grass Killer Super Concentrate (71995-25) master labels are being revised to include refill instructions for all Roundup Ready-To-Use containers. The recommended refill rates are double the "for best results" use rate on the respective labels. This is necessary in order to obtain the same concentration of glyphosate in the original Roundup Ready-To-Use (71995-23) products which are now twice as strong (1.96% glyphosate). In addition, new alternate brand named products will be introduced which provide for quick and easy refill of the PNS II package, each container will equal one PNS II refill. Therefore additional packaging instructions and claims are being included for these refill products (Roundup PNS Refill Concentrate and Roundup PNS Refill Super Concentrate).

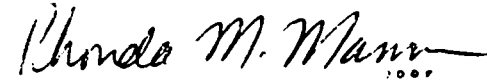
Monsanto Company and The Scotts Company will present to the Agency an actual production PNS II unit at end of April and will ask for final approval of the redesigned package. Monsanto would like to request that the Agency approve these amendments within a week of the Agency approving the final design.

The following documents are enclosed with this letter:

- Three (3) Applications for Pesticide - Amendment (form 8570-1)
- Five (5) copies of the revised Roundup RTU, Concentrate, and Super Concentrate labels
- One (1) copy of the revised Roundup RTU, Concentrate, and Super Concentrate labels highlighting revisions to the most recent approved label

Should you require any additional information or have any questions, please contact Dr. Marsha Gray at our Washington office (202) 783-2460 or me directly at (314) 694-8785 or rmmann@monsanto.com.

Sincerely,


Rhonda M. Mannion
Registration Manager

cc: V. Walters
M. Gray
D. Fee-White
J. Dobslaw
File room copy

Roundup Weed & Grass Killer Concentrate

Marked - Shows Changes

EPA Reg No. 71995-26

[Editorial Notes: Bracketed text [] is for internal use or serves as a 'place holder' for graphics. Parenthetical text () denotes optional wording.]

[Refer to APPENDIX 1 for consolidated list of label claims.]

[Refer to APPENDIX 2 for packaging related claims/instructions]

Roundup® Weed & Grass Killer Concentrate

Alternate Brand Names: Roundup Pull N' Spray Refill Concentrate
Roundup Pull N' Spray II Refill Concentrate

Active Ingredient

Glyphosate, isopropylamine salt 25.0 %

Other Ingredients 75.0 %

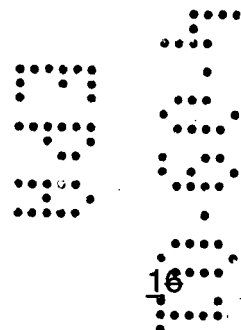
KEEP OUT OF REACH OF CHILDREN

CAUTION

See back panel booklet for additional precautionary statements.

(Read precautions and directions on back label.)

NET [xxx]



Product Facts

Treats up to xx sq ft (approx. size of XX tennis courts)

[When calculating coverage, one gallon treats 300 sq ft and a tennis court is 2,106 sq ft.]

KILLS [Illustrate grassy, broadleaf and woody weeds]

WEEDS ALL TYPES OF WEEDS & GRASSES

WHERE TO USE

- On patios, walkways, driveways, gravel or mulch beds
- Around fruits, vegetables, flowers, shrubs or trees
- Along fences
- In large areas - For lawn replacement
- For garden plot preparation

AMOUNT For best results

TO USE • 6 fl oz (12 Tbs) per gallon of water for established or tough weeds

[For Roundup Pull N' Spray (II) Refill Concentrate]

• **To refill Roundup Pull N' Spray (II)**

Empty entire contents (13 oz) into empty 1.33 gallon Roundup Pull N' Spray (II) container and fill with water.

[phone icon] **Questions, Comments or Medical Information**

call 1-800-225-2883

www.roundup.com

(call 1-888-Roundup)

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS

[optional tank sprayer illustration]

Tank Sprayer (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- For easy to kill weeds such as seedlings, add 3 fl oz (6 Tbs) to 1 gallon of water
- (For tough established weeds / For best results,) add 6 fl oz (12 Tbs) to 1 gallon of water
- Spot treat or spray evenly over 300 sq ft.

*[optional DNS illustration]***Hose-End Sprayer**

For large areas consider using the Ortho Dial 'n Spray®

- Set dial to 5 1/3 or 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. DO NOT add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

*[optional PNS (II) illustration]***Roundup Pull N' Spray (II)**

- Add entire contents of 13 fl oz Roundup Pull N' Spray (II) Refill Concentrate to the empty Roundup Pull N' Spray (II) container and fill with water.

OR

- Add 13 fl oz of Roundup Concentrate to the empty Roundup Pull N' Spray (II) container and fill with water.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

Do not (mix, store or) apply with (in) a galvanized or unlined steel (except stainless steel) sprayer, or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

HOW TO APPLY *[optional illustration]*

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a sheet (piece) of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

IMPORTANT

Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

WHEN TO APPLY *[optional illustration]*

- Apply when weeds are actively growing. Use anytime weeds and grasses are

actively growing.

- For best results, apply during warm, sunny weather (above 60° F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- (RAIN-PROOF:) Rain or watering 2 hours after application will not wash away effectiveness.
- Apply when weeds are small and before seeds form. Established (Hard to kill) weeds may require a repeat application.

ADDITIONAL TIPS <i>[optional illustration]</i>

- **To Kill Vines**

- If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 feet and spray vines thoroughly.
- If vines are climbing shrubs or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a sheet (piece) of cardboard or plastic.

- **To Kill Stumps**

- Cut living stump close to ground.
- Drive 4 to 5 holes into freshly cut stump.
- Immediately pour undiluted product into holes.

- **For Lawn Replacement**

Use Roundup to kill a (an old) lawn and (its) weeds before planting (a) new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

[Alternate text]

- Wait 7 days for weeds and lawn to die. Repeat if necessary.
- Rake or till to prepare area for planting seed or sod.

- **Kudzu**

For best results, apply in mid to late summer when vines are mature and actively growing.

- **Wild Blackberry**

Spray anytime plants are actively growing. Dead canes should be cut down and removed. Reapplication is often required to kill deep roots.

- **Poison Ivy & Poison Oak**

Contact with these plants anytime of the year can cause an allergic reaction. Spray

anytime plants are actively growing, but at least 4 weeks before the first killing frost in the fall. Reapply, if new growth appears. Handle dead plants with rubber gloves. Dispose of plants and rubber gloves in tightly sealed garbage bags.

- **For Flowerbed & Garden Preparation**

Use Roundup to kill weeds, grasses and brush before planting flowers, fruits, vegetables or herbs.

- If soil is dry, water before application and 2 to 3 days after application.
- Apply evenly over treatment area.
- Wait the number of days indicated below before planting.

WHEN TO REPLANT <i>[optional illustration]</i>

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:
Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato, radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.
- The following fruits, vegetables and herbs may be planted **3 days after** application:
Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all), pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.
- Lawn grasses may be planted **7 days after** application.

WHEN TO HARVEST <i>[optional illustration]</i>

If used to control weeds around fruits or nuts, allow the following number of days before harvesting:

- Citrus (citron, grapefruit, lemon, lime, mandarin, orange, tangelo and tangerine) – **1 day.**
- Nuts (almond, beechnut, cashew, chestnut, hazelnut, pecan, pistachio and walnut) – **3 days.**
- Apple, avocado, banana (plantains), berries (except cranberries), dates, figs, grapes, kiwi fruit, loquat, passion fruit, pear, persimmon, pomegranate and quince – **14 days.**
- Apricot, cherries, nectarine, olives, peach, plum and prunes – **17 days.**

(OR)

- If used to control weeds around fruit or nut trees, caneberries or grapevines, allow **17 days** before harvesting.

HOW IT WORKS *[optional illustration]*

Roundup enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found (only) in plants. Any product (Roundup) not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

KILLS ALL TYPES OF WEEDS & GRASSES *[optional illustration]*

Weeds (including): Artichoke thistle, beggarweed, black medic, blue mustard, blue toadflax, brassbuttons, broadleaf plantain, burclover, buttercup, Canada thistle, cattail, chickweed, cocklebur, common groundsel, common mullein, common plantain, common ragweed, creeping beggarweed, creeping-charlie, curly dock, dandelion, dog fennel, evening primrose, false dandelion, fiddleneck, field bindweed (wild morningglory), field pennycress, filaree, Florida pusley, garden spurge, henbit, horsenettle, horseradish, horseweed/ marestalk, iceplant, knapweed, knotweed, lambsquarters, lantana, little bittercress, London rocket, mallow, mayweed, milkweed, mouseear chickweed, narrowleaf (buckhorn) plantain, nightshade (silverleaf), oldenlandia, oxalis, Pennsylvania smartweed, pennywort, poison hemlock, prickly lettuce, primrose, prostrate spurge, puncturevine, ragweed, red clover, redroot pigweed, shepherdspurge, smooth catsear, smooth pigweed, sowthistle, spotted spurge, tansy ragwort, tansymustard, teaweed, trumpetcreeper, tumble mustard, Virginia creeper, white clover, whitetop, wild barley, wild mustard, wild oats, wild sweet potato, yellow starthistle, and other broadleaf weeds

Grasses (including): Annual bluegrass, annual ryegrass, bahiagrass, barnyardgrass, bentgrass, Bermudagrass, brome grass, Cogongrass, crabgrass, creeping bentgrass, dallisgrass, fall panicum, fescue, field sandbur, foxtail, goosegrass, guineagrass, Johnsongrass, Kentucky bluegrass, kikuyugrass, lovegrass, maidencane, nimblewill, nutsedge, orchardgrass, pampas grass, perennial ryegrass, purple nutsedge, quackgrass, sandspur, smooth brome grass, sprangletop, St. Augustinegrass, tall fescue, Texas panicum, Timothy, torpedograss, vaseygrass, witchgrass, yellow nutgrass, zoysia and other grassy weeds

Brush (Tough Weeds) Unwanted Tress, Shrubs & Vines (including):

Alder, ash, (quacking) aspen, blackberry, bluegum eucalyptus, broom (French, Scotch), buckwheat, ceanothus, chamise, cherry, coyote brush, dewberry, elderberry, elm, eucalyptus, giant reed, hawthorn, hazel, honeysuckle, kudzu, locust, madrone, maple, oak, persimmon, poison oak, poison ivy, poplar, raspberry, sage, sagebrush, salmonberry, saltcedar, sassafras, sumac, sweetgum, tan oak, thimbleberry, tree tobacco, wild rose (multiflora) willow and other tough weeds

[re-entry icon] People and pets may enter treated area after spray has dried.

STORAGE AND DISPOSAL [trash can illustration]

STORAGE: Store in original container in a safe place.

DISPOSAL: Empty Container: Do not reuse container. -Put in trash. (Recycle where available.) **Partially Full Container:** Call your local waste disposal service (or 1-800-CLEANUP). If local laws permit, put partially full container in trash. Never pour product down any drain.

HOW TO REFILL ROUNDUP READY-TO-USE CONTAINERS

- **24 fl oz Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 2 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **½ Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 5 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 10 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **1.33 Gallon Roundup PNS (II):**
To empty container add 13 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **6L Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 16 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.
- **2 Gallon Roundup Weed & Grass Killer₁ Ready-To-Use:**
To empty container add 20 fl oz of Roundup Concentrate then fill with water very slowly to avoid foaming.

PRECAUTIONARY STATEMENTS [optional illustration]**HAZARDS TO HUMANS & DOMESTIC ANIMALS**

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

FIRST AID	
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently for 15-20 minutes.• Remove contact lenses, if present, after first 5 minutes, then continue rinsing.• Call a poison control center (1-800-225-2883 or 1-888-768-6387 or 1-888-Roundup) or doctor for treatment advice.
Emergency Medical Information	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-225-2883 (1-888-768-6387 or 1-888-Roundup) for emergency medical treatment information.	

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

This product is protected by U.S. Patents No. 4,405,531 and No. 5,703,015 and No. 6,063,733 and No. 6,121,199 and No. 6,121,200. Other patents pending. No license granted under any non-U.S. patent(s).

This is an end-use product. Monsanto does not intend and has not registered if for reformulation or repackaging.

[phone icon] **Questions, Comments or Medical Information**

call 1-800-225-2883

www.roundup.com

(call 1-888-Roundup)

Roundup is a trademark of Monsanto Company

©[] MONSANTO COMPANY

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 1750
Columbus, OH 43216
Form []
EPA Reg. No. 71995-26
EPA Est. 239-1A-3¹, 58996-MO-1^A
Superscript is first letter of lot number
Made in USA

APPENDIX 1 – Consolidated List of Label Claims
[Ordered alphabetically]

- 40% more concentrated
- 40% stronger
- 40% stronger to speed absorption to the root
- Absorbed into both broadleaf and grassy weeds
- Absorbs on contact, starts working immediately
- Also use for large jobs such as lawn renovation and vegetable and flower garden
 - —preparation
- Approved for most (many) lawn and garden uses
- Before [*weed graphics*] / After [*weed graphics*]
- Begins absorbing on contact
- Can be used around (small) fruits and vegetables
- Can be used for habitat restoration, controlling exotic vegetation, and for site
 - —preparation of wildlife food plots
- Can reseed or sod lawns 7 days after treatment
- Concentrated for extra value
- Covers up to 300 sq ft per gallon of spray
-
- Dead Weeds Guaranteed
- Dead Weeds Guaranteed or Your Money Back
- Does not have soil activity
- Economical
- Economical concentrate formula
- Easy to apply with an Ortho Dial 'n Spray®, hose-end, tank or (hand held) trigger
 - —sprayer
- Even if it rains – Roundup won't lose its effectiveness
- Exclusive Roundup formula
- For control that doesn't (won't) wash away
- For general weed control - kills weeds and grasses in 2 to 4 weeks - roots and all
- Guaranteed same effective results even if it rains within hours
- Improved extra strength formula
- Improved formula, completely kills even the toughest weeds and grasses
- Improved formulation -now RainFast - fast uptake
-
- Kills almost all (annual and perennial) weeds, grasses and other unwanted plants
- Kills existing weeds only, no residual activity in soil
- Kills more weeds in more places.
- Kills over 100 weeds
- Kills (to) the root
- Kills the root so weeds don't come back
- Kills the roots of (both) broadleaf and grassy weeds
- Kills the weed you see and the root you don't
- Kills unwanted weeds and grasses, roots and all
- Kills weeds in flowerbeds, around trees, shrubs and fences, and on patios, paths,

- —sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard
- Kills weeds, roots and all
-
- Lawns and gardens can be reseeded or planted soon after treatment
- Make only what you need
- Multipurpose grass and broadleaf weed control
- NEW!
- No odor
- No root. No weed. No problem.
- NOW!
- Now a shorter wait for replanting!
- Once it enters the plant, it won't wash off
- Ornamental gardens can be reseeded or planted 1 day after treatment
-
- RainFast in hours - enters the plant on contact
- RAIN-PROOF™
- RAIN-PROOF™ in two hours
- (Roundup) Kills the weed you see and the root others leave behind
- Roundup kills weeds and grasses in – Patios – Driveways – Sidewalks – Gardens and
- —other non-lawn areas
- Satisfaction guaranteed or we will gladly refund purchase price
- Satisfaction guaranteed or your money back with proof of purchase
- Speeds absorption to the root for complete kill
- Spray weeds (Use) in flowerbeds, around trees, shrubs and around fences, and on
- —patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas
- in
- —your yard
- Starts working immediately
- Stronger
- Transorb technology speeds Roundup to the root to kill even tough weeds
-
- Ultra concentrated formula, 40% more weed killing power
- Ultra formula
- Use around fruits and vegetables
- (Use) For Brush Control
- (Use) For General Weed Control: Use along fences, paths, patios, sidewalks and
- —driveways, around trees, shrubs, ornamental plantings, flowerbeds, and buildings,
- —and in brick and gravel walkways.
- Use to trim and edge landscape areas.
- (Use) For Landscaping: Use to prepare areas for planting of ornamentals, trees,
- —shrubs, desert landscapes, rock gardens, flowerbeds or similar plantings.
- Use for large jobs like garden plot preparation and lawn replacement (renovation)
- (Use) For Lawn Renovation
- (Use) For Spot Spraying: Use in and around flowerbeds, ornamental, fruit and nut
- —trees, grapevines, shrubs, fences, driveways and walkways
- (Use) For Stumps

- (Use) For Wildlife Areas: Use to prepare areas for planting wildlife food. Exotic or undesirable plants can be controlled to allow for planting or recovery of native plant
- species. Spot treatments can be made to selectively remove unwanted plants.
- (Use in) Apply with a Big Shot™ Multi-Purpose Sprayer or other tank sprayer, Ortho Dial 'n Spray® or other hose-end sprayer, or a (hand held) trigger sprayer
- Use to refill Roundup Ready-To-Use containers
- Use to prepare sites: for large plantings, for planting flowerbeds, fruit trees, ornamentals, vegetables and gardens, and for renovating lawns
- Visible effects are gradual wilting and yellowing advancing to complete browning and root destruction.
- Visible results in 2 to 4 days
- Water based formula
- Won't wash off
- Won't wash away
- Works first time, every time
- Works only when absorbed by the foliage of weeds
- *[Promotional options]*
- Save up to \$[x] on (your) next purchase
- Free weed guide inside
- Free [] with this purchase of Roundup concentrate quart
- FREE REFILL
- FREE SAMPLE
- SAMPLE NOT FOR SALE

APPENDIX 2 – Packaging Related Claims

NET xx fl oz (qt or gal) (xx mL or L)
6 fl oz (177 mL)
16 fl oz (1 pt) (473 mL)
32 fl oz (1 qt) 946 mL)
53.7 fl oz (0.42 gal) (1.5 L)
64 fl oz (1/2 gal) (1.89 L)
128 fl oz (1 gal) (3.79 L)

[corner flap]

OPEN

Resealable Label for Directions & Precautions

PULL HERE TO OPEN LABEL

PEEL HERE

PEEL OPEN FOR USE DIRECTIONS AND FURTHER INFORMATION

PRESS TO RESEAL

[Net contents] Makes up to 'X' gallons

Makes between 'X' – 'Y' gallons

Mix with water to make 'X' gallons of spray solution

Covers up to 'Z' sq ft

Mix with water to cover up to 'Z' sq ft

[$X = \text{net contents} + 3$]

[$Y = \text{net contents} + 6$]

[$Z = X * 300$]

[13 oz PNS (II) Refill Concentrate]

Pre-measured

Convenient

Refills (Refill for) (Roundup) Pull N' Spray (II)

Use to refill (Roundup) Pull N' Spray (II)

Refill (Roundup) Pull N' Spray (II) and save

Save money

Easy-to-pour

Refill

Makes one (1) refill for (Roundup) Pull N' Spray (II)

NEW

NOW

(Roundup) Pull N' Spray (II) Refill

Compare to the price of a new (Roundup) Pull N' Spray (II)

No mess

No messy clean-up

No measuring

Easy-to-use

Save time
Less waste
Treat more weeds for less money
Treat twice as many weeds for less money
Great (Excellent) (Outstanding) value
Value Refill Bottle
Pull N' Spray (II) Refill
More economical
Just pour
Quick and (&) Easy
Just pour and (&) add water
Hassle free
Simple
Just pour, fill, and (&) spray

- [Pint] Makes up to 5 gallons
Makes between 2½ - 5 gallons
Mix with water to make 5 gallons of spray solution
Covers up to 1,500 sq ft
Mix with water to cover up to 1,500 sq ft
- [Quart] Makes up to 10 gallons
Makes between 5 – 10 gallons
Mix with water to make 10 gallons of spray solution
Covers up to 3,000 sq ft
Mix with water to cover up to 3,000 sq ft
- [0.42 Gallon] Makes up to 18 gallons
Makes between 9 – 18 gallons
Mix with water to make 18 gallons of spray solution
Covers up to 5,400 sq ft
Mix with water to cover up to 5,400 sq ft
- [Half Gallon] Makes up to 21 gallons
Makes between 10 – 21 gallons
Mix with water to make 21 gallons of spray solution
Covers up to 6,300 sq ft
Mix with water to cover up to 6,300 sq ft
- [Gallon] Makes up to 42 gallons
Makes between 21 – 42 gallons
Mix with water to make 42 gallons of spray solution
Covers up to 12,600 sq ft
Mix with water to cover up to 12,600 sq ft

New! Larger size, covers up to ['Z'] sq ft



AWP 11/21/2000

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 30 2000
NOV 30 2000

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ms. Rhonda M. Mannion
Monsanto Company, Lawn and Garden Products
600 13th Street, N.W. Suite 660
Washington, DC 20005

Dear Ms. Mannion:

Subject: Roundup Weed & Grass Killer Concentrate (Clarify and Reformat Label)
EPA Registration No. 71995-26
Your Application Dated September 29, 2000

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable. The amended labeling supercedes all previously accepted one. A stamped copy of labeling is enclosed for your records.

Sincerely,

James A. Tompkins
James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

71995-26

NEW
STRONGER!
DEAD WEEDS
GUARANTEED!

ACCEPTED
NOV 30 2000

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 71995-26

Roundup
WEED & GRASS KILLER
CONCENTRATE
NO ROOT.
NO WEED.
NO PROBLEM.™

PPN 21176Y2-3 (003400)



Active Ingredient
Glyphosate, isopropylamine salt 25.0%
Other Ingredients 75.0%

KEEP OUT OF
REACH OF CHILDREN
See back panel booklet for
additional precautionary statements. **CAUTION**
NET 64 FL OZ (1/2 GAL)

00:90:07
FRONT

Roundup Weed & Grass Killer
Concentrate

OPEN
Resealable Label
for Directions &
Precautions

RAIN-PROOF IN TWO
HOURS
FOR CONTROL THAT WON'T WASH AWAY

PRODUCT FACTS

Makes up to 21 Gallons
Treats up to 6,300 sq ft (approx. size of 3 tennis courts)

KILLS WEEDS



ALL TYPES OF WEEDS & GRASSES

WHERE TO USE

- ✓ On patios, walkways, driveways, gravel or mulch beds
- ✓ Around fruits, vegetables, flowers, shrubs or trees
- ✓ Along fences
- ✓ In large areas – For lawn replacement
– For garden plot preparation

AMOUNT TO USE

For Best Results –
6 fl oz (12 Tbs) per gallon of water

Questions, Comments or Medical Information:
Call 1-888-ROUNDUP www.roundup.com

For easy to kill weeds such as seedlings
add 3 fl oz (6 Tbs) to 1 gallon of water.

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 1750
Columbus, OH 43216
PPN 21176Y2-4 (023200)
EPA Reg. No. 71995-26
EPA Est. 239-IA-3, 58996-MO-1A
Superscript is first letter of lot number
Made in USA



0 70183 50060 4
1020

BACK

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS

Tank Sprayer (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- Add 6 fl oz (12 Tbs) to 1 gallon of water.
- Spot treat or spray evenly over 300 sq ft.

Hose-end Sprayer

For large areas consider using the **ORTHO® Dial 'n Spray®**

- Set dial to 5-1/3 or 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. **DO NOT** add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

For easy to kill weeds such as seedlings add 3 fl oz (6 Tbs) to 1 gallon of water. Do not apply with a galvanized or unlined steel (except stainless steel) sprayer or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

How To Apply

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a piece of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

Important: Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

When To Apply

- Apply when weeds are actively growing. Use anytime weeds and grasses are actively growing.
- For best results, apply during warm, sunny weather (above 60°F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- **RAIN-PROOF:** Rain or watering 2 hours after application will not wash away effectiveness.

Additional Tips**To Kill Vines**

- If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 ft and spray vines thoroughly.
- If vines are climbing shrubs, or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a piece of cardboard or plastic.

To Kill Stumps

- Cut living stump close to ground.
- Drive 4 to 5 holes into freshly cut stump.
- Immediately pour undiluted product into holes.

For Lawn Replacement

Use Roundup to kill a lawn and weeds before planting new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

BACK

When To Replant

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:
Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.
- The following fruits, vegetables and herbs may be planted **3 days after** application:
Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all), pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Lawn grasses may be planted **7 days after** application.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.

How It Works

Roundup enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found only in plants. Any product not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

Satisfaction Guaranteed or your money back with proof of purchase.



**Weed & Grass Killer
Concentrate**

STORAGE AND DISPOSAL

STORAGE: Store in original container in a safe place.

DISPOSAL: Empty Container: Put in trash. (Recycle where available.)

Partially Full Container: Call your local waste disposal service. If local laws permit, put partially full container in trash. Never pour product down any drain.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

People and pets may re-enter treated areas after spray has dried.

FIRST AID

If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing. • Call a poison control center 1-888-768-6387 or doctor for treatment advice.
------------	---

Emergency Medical Information:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-888-768-6387 for emergency medical treatment information.

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.



Questions, Comments or Medical Information:
Call 1-888-ROUNDUP www.roundup.com

This product is protected by U.S. Patents No. 4,405,531 and No. 5,703,015. Other patents pending. No license granted under any non-U.S. patent(s). This is an end-use product. Monsanto does not intend and has not registered it for reformulation or repackaging.

Roundup is a trademark of Monsanto Company.

© 2000 MONSANTO COMPANY

Manufactured for **Monsanto Company**, Lawn & Garden Products

P.O. Box 1750 Columbus, OH 43216

PPN 21176Y2-4 (023200)

EPA Reg. No. 71995-26

EPA Est. 239-IA-3¹, 58996-MO-1^A

Superscript is first letter of lot number

Made in USA

BACK

1. DATE RECEIVED		2. DATE PLACED IN		3. ACTION TYPE		4. DATE REVIEW COMPLETED	
11/21/2000				Clarify Label		300	
A	REVIEWABILITY TEAM						
B	PRODUCT MANAGER TEAM EFFICACY REVIEW						
C	PRODUCT MANAGER TEAM HUMAN SAFETY REVIEW						
D	PRODUCT MANAGER TEAM ENVIRONMENTAL SAFETY REVIEW						
E	PRODUCT MANAGER TEAM RECOMMENDATION REVIEW						
F	PRODUCT MANAGER						
G	INTERAGENCY REFERRAL						
H	COST-CONCEPT REVIEW						
I	PUBLIC COMMENTS REVIEW						
J	USE-ORANGE INSECTICIDE EFFICACY						
K	USE-ORANGE HERBICIDE EFFICACY						
L	USE-ORANGE FUNGICIDE EFFICACY						
M	USE-ORANGE ROSENTRICIDE EFFICACY						
N	USE-ORANGE DISINFECTANT EFFICACY						
O	CHLORINE-ORANGE RESINUS CHLORINE						
P	USE-ORANGE ENVIRONMENTAL CHLORINE						
Q	FORICOL-ORANGE HUMAN SAFETY						
R	USE-ORANGE ENVIRONMENTAL SAFETY						
S							
T							
PRODUCT MANAGER SIGNATURE				TYPE OF RESPONSE			



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 71995-26	2. EPA Product Manager Mr. Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Roundup Weed & Grass Killer Concentrate	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company 600 13th Street N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input checked="" type="checkbox"/> Final printed labels in response to Agency letter dated <u>9 February 2000</u>
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Submission of final printed labels

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to wilfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	
				<input type="checkbox"/> Plastic	
				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) _____	
If "Yes" Unit Packaging wgt.		No. per container	If "Yes" Package wgt.	No. per container	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)			
Name Mr. Marsha Gray	Title Registration Manager	Telephone No. (Include Area Code) (202) 783-2460	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received (Stamped)
2. Signature 	3. Title Registration Manager		
4. Typed Name Rhonda M. Mannion	5. Date <u>29 September 2000</u>		

MONSANTO
Food • Health • Hope™



MONSANTO COMPANY
600 13TH STREET, N.W.
SUITE 660
WASHINGTON, D.C. 20005
TEL: (202) 783-2460
FAX: (202) 783-2468

September 15, 2000

Hand Delivered

Document Processing Center (NOTIF)
Office of Pesticide Programs
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2,
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

Attention: Mr. Jim Tompkins
Product Manager (Team 25)

Subject: **Roundup® Weed & Grass Killer Concentrate (EPA Reg. No. 71995-26).
Submission of Final Printed Labels and Notification of Label Text Changes.**

Dear Mr. Tompkins:

Monsanto is submitting three (3) copies of the final printed label for Roundup® Weed & Grass Killer Concentrate (print plate no. 21176Y2-1). The Agency approved this product on 9 February 2000 under EPA Registration Number 71995-26. Subsequently a label amendment was submitted and approved by the Agency on 25 May 2000. The final printed label submitted herein is the first label produced under this registration.

The text of the Roundup® Weed & Grass Killer Concentrate label is the same as the EPA stamped label dated 25 May 2000 with the following exceptions:

- The *When to Apply* section has been modified to remove the recommendation "*Apply when weeds are small and before seeds form. Established (Hard to Kill) weeds may require a second application*". This statement was an artifact of the old concentrate label (71995-17) where this recommendation was important for product performance. This recommendation is no longer necessary with this improved formulation since it contains 25% more glyphosate and provides adequate efficacy on mature weeds without repeat application.
- Other minor formatting changes.

Should you have any questions, please contact Ms. Marsha Gray at our Washington office (202) 783-2460 or me directly at (314) 694-8785.

Sincerely,


Rhonda M. Mannion
Registration Manager

cc: M.Gray
D. Hinton
M. Brown
T. Staniforth
A. Hedgecock
Mannion file

Enclosure


 United States
 Environmental Protection Agency

 Office of Pesticide Programs (7505C)
 Washington, DC 20460

247631

Notice of Supplemental Distribution of a Registered Pesticide Product

Instructions

After a registrant has obtained final registration for the basic product, the registrant may then supplementally distribute his/her product. One form must be submitted for each distributor product and must be signed by the distributor involved. The basic registration number and the distributor company number must be shown.

If a registrant has a potential distributor who does not have a company number assigned, she/he should have the distributor apply, on letterhead stationery, to the Registration Division to have a number assigned prior to submitting this form to the agency.

This Notice of Supplemental Distribution must be submitted by the basic registrant. The completed form must have the concurrence and signature of both the registrant and the distributor.

EPA Registration Number of Product

Distributor Company Number

~~239-2469~~ 5 71995-26

3 55859

Note: Do not submit distributor product labels

Name of Registered Product (basic product name accepted by EPA)

Distributor Product Name

Kieraway Systemic Weed & Grass Killer
~~ORTHO SYSTEMIC WEED & GRASS KILLER~~

Proline Renegade

Name and Address of Distributor (Type; include ZIP code)

 UNLIMITED SALES INC.
 1941 S.W. MACEDO BLVD.
 PORT ST. LUCIE, FL 34984

Read All Conditions Before Signing

1. The distributor product must have the same composition as the basic product.
2. The distributor product must be manufactured and packaged by the same person who manufactures and packages the registered basic product.
3. The labeling for the distributor product must bear the same claims as the basic product, provided, however, that specific claims may be deleted if by doing so, no other changes to the label are necessary.
4. The product must remain in the manufacturer's unbroken container.
5. The label must bear the EPA registration number of the basic product, followed by a hyphen and the distributor's company number.
6. Distributor product labels must bear the name and address of the distributor qualified by such terms as "packed for...", "distributed by..."; or "sold by..." to show that the name is not that of the manufacturer.
7. All conditions of the basic registration apply equally to distributor products. It is the responsibility of the basic registrant to see that all distributor labeling is kept in compliance with requirements placed on the basic product.

Distributor

We intend to market our product under the Distributor Product Name specified above, subject to the conditions specified on this Notice.

Signature and Title of Distributor

Date

X William Van Becher

X 2/4/2000

Registrant

I agree that the distributor named above may distribute and sell the Distributor Product specified above, subject to the conditions specified on this Notice.

Signature and Title of Registrant

Date

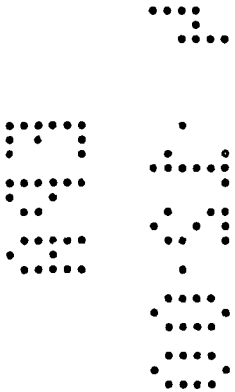
X [Signature]

Regulator Affairs
Manager

29 March 00

Paperwork Reduction Act Notice

The annual respondent burden for the Notice of Supplemental Distribution of a Registered Pesticide Product is estimated to average 15 minutes per response, including time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information. Send comments regarding this burden, to Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460; and to Paperwork Reduction Project (OMB No. 2070-0044), Office of Management and Budget, Washington, DC 20503, Marked "Attention Desk Officer for EPA."



JUL 3 2000

Mr. Dennis P. Ward
Regulatory Affairs Manager
Lawn & Garden Products
MONSANTO
600 13th Street N.W. Suite 660
Washington, D.C. 20005

Dear Mr. Ward:

This is in response to your request dated May 3, 2000 to change the primary brand name for **EPA Registration 71995-26** from Roundup® Concentrate Weed & Grass Killer2 to:

Roundup®Weed & Grass Killer Concentrate

Your request for the name change is **accepted** and the change will be made to the Agency's records. All future correspondence on this product should reference the new name.

Sincerely yours,



Sherada D. Hobgood
Notifications Review Coordinator
Registration Division (7505C)



United States
Environmental Protection Agency
 Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 71995-26	2. EPA Product Manager James A. Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Roundup Concentrate Weed & Grass Killer2	PM # 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company, Lawn & Garden Products 600 13th St., N.W., Suite 660 Washington, DC 20005		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____
<input type="checkbox"/> Check if this is a new address		

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of **change in primary brand name** to: **"Roundup Weed & Grass Killer Concentrate"**.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	
If "Yes" Unit Packaging wgt. No. per Container		If "Yes" Package wgt. No. per Container		<input type="checkbox"/> Plastic	
				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Russell P. Schneider		Title Regulatory Affairs Director		Telephone No. (Include Area Code) (202) 383-2866	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received
2. Signature 		3. Title Regulatory Affairs Manager			
4. Typed Name Dennis P. Ward		5. Date May 3, 2000			

MONSANTO

Food • Health • Hope



Dennis P. Ward, Ph.D.
Regulatory Affairs Manager
(636) 737-6631

MONSANTO COMPANY
700 CHESTERFIELD PKWY NORTH
CHESTERFIELD, MISSOURI 63198
<http://www.monsanto.com>

May 3, 2000

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

Attn: James Tompkins, PM 25

Subj: Notification of change in **Primary Brand Name**
Roundup® Concentrate Weed & Grass Killer2, EPA Reg. No. 71995-26

Dear Mr. Tompkins:

Please find attached our Notification for a change in the primary brand name assigned to EPA Reg. No. 71995-26. The new primary brand name for this product is:

"Roundup® Weed & Grass Killer Concentrate"

This brand name differs from all other names in our product portfolio.

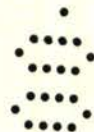
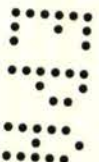
Should you require any additional information regarding this submission please feel free to contact Dr. Russell Schneider in our Washington Office (202-383-2866) or myself directly. Thank you.

Sincerely,

Dennis P. Ward

Att.

cc: Russell Schneider / Monsanto





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 25 2000

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Mr. Dennis P. Ward
Monsanto Company, Lawn & Garden Products
600 13th Street, N.W. Suite 660
Washington, DC 20005

Dear Mr. Ward:

Subject: Roundup Weed & Grass Killer Concentrate (Label In Response to PR-Notice 2000-3)
EPA Registration No. 71995-26
Your Application Dated May 4, 2000

The labeling referred to above submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, is acceptable. A stamped copy of labeling is enclosed for your records.

Sincerely,

Vukie K. Walters for
James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

[Editorial Notes: Bracketed text [] is for internal use or serves as a 'place holder' for graphics. Parenthetical text () denotes optional wording.]

[Refer to APPENDIX 1 for consolidated list of label claims.]

[Refer to APPENDIX 2 for packaging related claims/instructions]

Roundup® Weed & Grass Killer Concentrate

Active Ingredient

Glyphosate, isopropylamine salt 25.0 %

Other Ingredients 75.0 %

KEEP OUT OF REACH OF CHILDREN

CAUTION

See back panel booklet for additional precautionary statements.

(Read precautions and directions on back label.)

NET [xxx]

ACCEPTED

MAY 25 2000

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 71995-26

Product Facts

Treats up to xx sq ft (approx. size of XX tennis courts)

*[When calculating coverage, one gallon treats 300 sq ft and a tennis court is 2,106 sq ft.]***KILLS** *[Illustrate grassy, broadleaf and woody weeds]***WEEDS** ALL TYPES OF WEEDS & GRASSES

WHERE TO USE

- On patios, walkways, driveways, gravel or mulch beds
- Around fruits, vegetables, flowers, shrubs or trees
- Along fences
- In large areas - For lawn replacement
- For garden plot preparation

AMOUNT For best results**TO USE** • 6 fl oz (12 Tbs) per gallon of water for established or tough weeds*[phone icon]* **Questions, Comments or Medical Information**

call 1-800-225-2883

www.roundup.com

(call 1-888-Roundup)

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS*[optional tank sprayer illustration]***Tank Sprayer** (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- For easy to kill weeds such as seedlings, add 3 fl oz (6 Tbs) to 1 gallon of water
- (For tough established weeds / For best results,) add 6 fl oz (12 Tbs) to 1 gallon of water
- Spot treat or spray evenly over 300 sq ft.

*[optional DNS illustration]***Hose-End Sprayer**

For large areas consider using the Ortho Dial 'n Spray®

- Set dial to 5 1/3 or 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. DO NOT add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

Do not (mix, store or) apply with (in) a galvanized or unlined steel (except stainless steel) sprayer, or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

HOW TO APPLY *[optional illustration]*

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a sheet (piece) of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

IMPORTANT

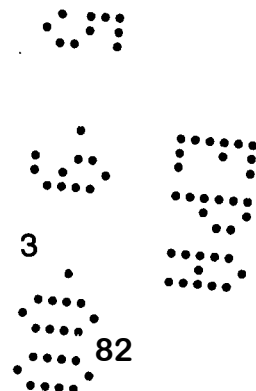
Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

WHEN TO APPLY *[optional illustration]*

- Apply when weeds are actively growing. Use anytime weeds and grasses are actively growing.
- For best results, apply during warm, sunny weather (above 60° F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- (RAIN-PROOF:) Rain or watering 2 hours after application will not wash away effectiveness.
- Apply when weeds are small and before seeds form. Established (Hard to kill) weeds may require a repeat application.

ADDITIONAL TIPS *[optional illustration]*

- **To Kill Vines**
 - If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 feet and spray vines thoroughly.
 - If vines are climbing shrubs or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a sheet (piece) of cardboard or plastic.
- **To Kill Stumps**
 - Cut living stump close to ground.
 - Drive 4 to 5 holes into freshly cut stump.
 - Immediately pour undiluted product into holes.



- **For Lawn Replacement**

Use Roundup to kill a (an old) lawn and (its) weeds before planting (a) new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

[Alternate text]

- Wait 7 days for weeds and lawn to die. Repeat if necessary.
- Rake or till to prepare area for planting seed or sod.

- **Kudzu**

For best results, apply in mid to late summer when vines are mature and actively growing.

- **Wild Blackberry**

Spray anytime plants are actively growing. Dead canes should be cut down and removed. Reapplication is often required to kill deep roots.

- **Poison Ivy & Poison Oak**

Contact with these plants anytime of the year can cause an allergic reaction. Spray anytime plants are actively growing, but at least 4 weeks before the first killing frost in the fall. Reapply, if new growth appears. Handle dead plants with rubber gloves. Dispose of plants and rubber gloves in tightly sealed garbage bags.

- **For Flowerbed & Garden Preparation**

Use Roundup to kill weeds, grasses and brush before planting flowers, fruits, vegetables or herbs.

- If soil is dry, water before application and 2 to 3 days after application.
- Apply evenly over treatment area.
- Wait the number of days indicated below before planting.

WHEN TO REPLANT <i>[optional illustration]</i>

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:

Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato, radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.

- The following fruits, vegetables and herbs may be planted **3 days after** application: Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all),

- pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.
 - Lawn grasses may be planted **7 days after** application.

WHEN TO HARVEST *[optional illustration]*

If used to control weeds around fruits or nuts, allow the following number of days before harvesting:

- Citrus (citron, grapefruit, lemon, lime, mandarin, orange, tangelo and tangerine) – **1 day**.
- Nuts (almond, beechnut, cashew, chestnut, hazelnut, pecan, pistachio and walnut) – **3 days**.
- Apple, avocado, banana (plantains), berries (except cranberries), dates, figs, grapes, kiwi fruit, loquat, passion fruit, pear, persimmon, pomegranate and quince – **14 days**.
- Apricot, cherries, nectarine, olives, peach, plum and prunes – **17 days**.
- If used to control weeds around fruit or nut trees, caneberries or grapevines, allow 17 days before harvesting.

HOW IT WORKS *[optional illustration]*

Roundup enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found only in plants. Any product (Roundup) not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

KILLS ALL TYPES OF WEEDS & GRASSES *[optional illustration]*

Weeds (including): Artichoke thistle, beggarweed, black medic, blue mustard, blue toadflax, brassbuttons, broadleaf plantain, burclover, buttercup, Canada thistle, cattail, chickweed, cocklebur, common groundsel, common mullein, common plantain, common ragweed, creeping beggarweed, creeping-charlie, curly dock, dandelion, dog fennel, evening primrose, false dandelion, fiddleneck, field bindweed (wild morningglory), field pennycress, filaree, Florida pusley, garden spurge, henbit, horsetail, horseradish, horseweed/ marestail, iceplant, knapweed, knotweed, lambsquarters, lantana, little bittercress, London rocket, mallow, mayweed, milkweed, mouseear chickweed, narrowleaf (buckhorn) plantain, nightshade (silverleaf), oldenlandia, oxalis, Pennsylvania smartweed, pennywort, poison hemlock, prickly lettuce, primrose, prostrate spurge, puncturevine, ragweed, red clover, redroot pigweed, shepherdspurge, smooth catsear, smooth pigweed, sowthistle, spotted spurge, tansy ragwort, tansymustard, teaweed, trumpetcreeper, tumble mustard, Virginia creeper, white clover, whitetop, wild barley, wild mustard, wild oats, wild sweet potato, yellow starthistle, and other broadleaf weeds

Grasses (including): Annual bluegrass, annual ryegrass, bahiagrass, barnyardgrass, bentgrass, Bermudagrass, brome grass, Cogongrass, crabgrass, creeping bentgrass, dallisgrass, fall panicum, fescue, field sandbur, foxtail, goosegrass, guineagrass, Johnsongrass, Kentucky bluegrass, kikuyugrass, lovegrass, maidencane, nimblewill, nutsedge, orchardgrass, pampas grass, perennial ryegrass, purple nutsedge, quackgrass, sandspur, smooth brome grass, sprangletop, St. Augustinegrass, tall fescue, Texas panicum, Timothy, torpedograss, vaseygrass, witchgrass, yellow nutgrass, zoysia and other grassy weeds

Brush (Tough Weeds) Unwanted Tress, Shrubs & Vines (including):

Alder, ash, (quacking) aspen, blackberry, bluegum eucalyptus, broom (French, Scotch), buckwheat, ceanothus, chamise, cherry, coyote brush, dewberry, elderberry, elm, eucalyptus, giant reed, hawthorn, hazel, honeysuckle, kudzu, locust, madrone, maple, oak, persimmon, poison oak, poison ivy, poplar, raspberry, sage, sagebrush, salmonberry, saltcedar, sassafras, sumac, sweetgum, tan oak, thimbleberry, tree tobacco, wild rose (multiflora) willow and other tough weeds

[re-entry icon] People and pets may enter treated area after spray has dried.

STORAGE AND DISPOSAL [trash can illustration]

STORAGE: Store in original container in a safe place.

DISPOSAL: Empty Container: Put in trash. (Recycle where available.) **Partially Full Container:** Call your local waste disposal service. If local laws permit, put partially full container in trash. Never pour product down any drain.

PRECAUTIONARY STATEMENTS [optional illustration]

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing. • Call a poison control center (1-800-225-2883 or 1-888-768-6387 or 1-888-Roundup) or doctor for treatment advice.
Emergency Medical Information	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-225-2883 (1-888-768-6387 or 1-888-Roundup) for emergency medical treatment information.	

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

This product is protected by U.S. Patents No. 4,405,531 and No. 5,703,015. Other patents pending. No license granted under any non-U.S. patent(s).

This is an end-use product. Monsanto does not intend and has not registered if for reformulation or repackaging.

<p>[phone icon] Questions, Comments or Medical Information call 1-800-225-2883 www.roundup.com (call 1-888-Roundup)</p>
--

Roundup is a trademark of Monsanto Company

©[] MONSANTO COMPANY

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 1750
Columbus, OH 43216
Form []
EPA Reg. No. 71995-26
EPA Est. 239-IA-3¹, 58996-MO-1^A
Superscript is first letter of lot number
Made in USA

APPENDIX 1 – Consolidated List of Label Claims
[Ordered alphabetically]

40% more concentrated
40% stronger
40% stronger to speed absorption to the root
Absorbed into both broadleaf and grassy weeds
Absorbs on contact, starts working immediately
Also use for large jobs such as lawn renovation and vegetable and flower garden preparation
Approved for most (many) lawn and garden uses
Before *[weed graphics]* / After *[weed graphics]*
Begins absorbing on contact
Can be used around (small) fruits and vegetables
Can be used for habitat restoration, controlling exotic vegetation, and for site preparation of wildlife food plots
Can reseed or sod lawns 7 days after treatment
Concentrated for extra value
Covers up to 300 sq ft per gallon of spray

Dead Weeds Guaranteed
Dead Weeds Guaranteed or Your Money Back
Does not have soil activity
Economical
Economical concentrate formula
Easy to apply with an Ortho Dial 'n Spray®, hose-end, tank or (hand held) trigger sprayer
Even if it rains – Roundup won't lose its effectiveness
Exclusive Roundup formula
For control that doesn't (won't) wash away
For general weed control - kills weeds and grasses in 2 to 4 weeks - roots and all
Guaranteed same effective results even if it rains within hours
Improved extra strength formula
Improved formula, completely kills even the toughest weeds and grasses
Improved formulation -now RainFast - fast uptake

Kills almost all (annual and perennial) weeds, grasses and other unwanted plants
Kills existing weeds only, no residual activity in soil
Kills more weeds in more places.
Kills over 100 weeds
Kills (to) the root
Kills the root so weeds don't come back
Kills the roots of (both) broadleaf and grassy weeds
Kills the weed you see and the root you don't
Kills unwanted weeds and grasses, roots and all
Kills weeds in flowerbeds, around trees, shrubs and fences, and on patios, paths,

sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard
Kills weeds, roots and all

Lawns and gardens can be reseeded or planted soon after treatment

Make only what you need

Multipurpose grass and broadleaf weed control

NEW!

No odor

No root. No weed. No problem.

NOW!

Now a shorter wait for replanting!

Once it enters the plant, it won't wash off

Ornamental gardens can be reseeded or planted 1 day after treatment

RainFast in hours - enters the plant on contact

RAIN-PROOF™

RAIN-PROOF™ in two hours

(Roundup) Kills the weed you see and the root others leave behind

Roundup kills weeds and grasses in – Patios – Driveways – Sidewalks – Gardens and other non-lawn areas

Satisfaction guaranteed or we will gladly refund purchase price

Satisfaction guaranteed or your money back with proof of purchase

Speeds absorption to the root for complete kill

Spray weeds (Use) in flowerbeds, around trees, shrubs and around fences, and on patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard

Starts working immediately

Stronger

Transorb technology speeds Roundup to the root to kill even tough weeds

Ultra concentrated formula, 40% more weed killing power

Ultra formula

Use around fruits and vegetables

(Use) For Brush Control

(Use) For General Weed Control: Use along fences, paths, patios, sidewalks and driveways, around trees, shrubs, ornamental plantings, flowerbeds, and buildings, and in brick and gravel walkways. Use to trim and edge landscape areas.

(Use) For Landscaping: Use to prepare areas for planting of ornamentals, trees, shrubs, desert landscapes, rock gardens, flowerbeds or similar plantings.

Use for large jobs like garden plot preparation and lawn replacement (renovation)

(Use) For Lawn Renovation

(Use) For Spot Spraying: Use in and around flowerbeds, ornamental, fruit and nut trees, grapevines, shrubs, fences, driveways and walkways

(Use) For Stumps

(Use) For Wildlife Areas: Use to prepare areas for planting wildlife food. Exotic or undesirable plants can be controlled to allow for planting or recovery of native plant

species. Spot treatments can be made to selectively remove unwanted plants.
(Use in) Apply with a Big Shot™ Multi-Purpose Sprayer or other tank sprayer, Ortho
Dial 'n Spray® or other hose-end sprayer, or a (hand held) trigger sprayer
Use to refill Roundup Ready-To-Use containers
Use to prepare sites: for large plantings, for planting flowerbeds, fruit trees,
ornamentals, vegetables and gardens, and for renovating lawns

Visible effects are gradual wilting and yellowing advancing to complete browning and
root destruction.

Visible results in 2 to 4 days

Water based formula

Won't wash off

Won't wash away

Works first time, every time

Works only when absorbed by the foliage of weeds

[Promotional options]

Save up to \$[x] on (your) next purchase

Free weed guide inside

Free [] with this purchase of Roundup concentrate quart

FREE REFILL

FREE SAMPLE

SAMPLE NOT FOR SALE

APPENDIX 2 – Packaging Related Claims

NET xx fl oz (qt or gal) (xx mL or L)
6 fl oz (177 mL)
16 fl oz (1 pt) (473 mL)
32 fl oz (1 qt) 946 mL)
53.7 fl oz (0.42 gal) (1.5 L)
64 fl oz (1/2 gal) (1.89 L)
128 fl oz (1 gal) (3.79 L)

[corner flap]

OPEN

Resealable Label for Directions & Precautions

PULL HERE TO OPEN LABEL

PEEL HERE

PEEL OPEN FOR USE DIRECTIONS AND FURTHER INFORMATION

PRESS TO RESEAL

[Net contents] Makes up to 'X' gallons

Makes between 'X' – 'Y' gallons

Mix with water to make 'X' gallons of spray solution

Covers up to 'Z' sq ft

Mix with water to cover up to 'Z' sq ft

$[X = \text{net contents} \div 3]$

$[Y = \text{net contents} \div 6]$

$[Z = X * 300]$

[Pint]

Makes up to 5 gallons

Makes between 2½ - 5 gallons

Mix with water to make 5 gallons of spray solution

Covers up to 1,500 sq ft

Mix with water to cover up to 1,500 sq ft

[Quart]

Makes up to 10 gallons

Makes between 5 – 10 gallons

Mix with water to make 10 gallons of spray solution

Covers up to 3,000 sq ft

Mix with water to cover up to 3,000 sq ft

[0.42 Gallon] Makes up to 18 gallons

Makes between 9 – 18 gallons

Mix with water to make 18 gallons of spray solution

Covers up to 5,400 sq ft

Mix with water to cover up to 5,400 sq ft

[Half Gallon] Makes up to 21 gallons
Makes between 10 – 21 gallons
Mix with water to make 21 gallons of spray solution
Covers up to 6,300 sq ft
Mix with water to cover up to 6,300 sq ft

[Gallon] Makes up to 42 gallons
Makes between 21 – 42 gallons
Mix with water to make 42 gallons of spray solution
Covers up to 12,600 sq ft
Mix with water to cover up to 12,600 sq ft

New! Larger size, covers up to ['Z'] sq ft

1. DATE PUBLISHED		10. DATE PUBLISHED		11. ACTION TYPE		12. OUTGOING DATE	
3/16/2000				Label in response to PR Notice 2000-3			
REVIEW TYPE	REVIEWER CODE (Initials)	SIGNATURE OF REVIEWER	COM- MENT CODE	DATE REVIEW COMPLETED			
A REVIEWABILITY TEAM							
B PRODUCT MANAGER TEAM EFFICACY REVIEW							
C PRODUCT MANAGER TEAM HUMAN SAFETY REVIEW							
D PRODUCT MANAGER TEAM ENVIRONMENTAL SAFETY REVIEW							
E PRODUCT MANAGER TEAM RESOLUTION REVIEW							
F PRODUCT MANAGER							
G INTERAGENCY REFERRAL							
H COST-BENEFIT REVIEW							
I PUBLIC COMMENTS REVIEW							
J EEC BRANCH INSPECTOR EFFICACY							
K EEC BRANCH INSPECTOR EFFICACY							
L EEC BRANCH INSPECTOR EFFICACY							
M EEC BRANCH INSPECTOR EFFICACY							
N EEC BRANCH INSPECTOR EFFICACY							
O CHEMISTRY BRANCH RESOLVE CHEMISTRY							
P EEC BRANCH ENVIRONMENTAL CHEMISTRY							
Q TOXICOLOGY BRANCH HUMAN SAFETY							
R EEC BRANCH ENVIRONMENTAL SAFETY							
S							
T							
PRODUCT MANAGER SIGNATURE			TYPE OF RESPONSE			CODE	

CPA Form 6570-12 (2-78)



United States
Environmental Protection Agency
 Washington, DC 20460

☐ Registration
☒ **Amendment**
☐ Other

OPP Identifier Number

264502

Application for Pesticide - Section I

1. Company/Product Number 71995-26	2. EPA Product Manager James A. Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Roundup Weed & Grass Killer Concentrate	PM # 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company, Lawn & Garden Products 600 13 th St., N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input checked="" type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated <u>5/12/2000</u>
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

This amendment is being submitted in response to PR Notice 2000-3. Revisions to the lower dilution rate and product coverage claims have also been made.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	
Certification must be submitted				<input type="checkbox"/> Plastic	
				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify)	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container Multiple sizes		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Russell P. Schneider		Title Regulatory Affairs Director		Telephone No. (Include Area Code) (202) 383-2866	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature 		3. Title Regulatory Affairs Manager			
4. Typed Name Dennis P. Ward		5. Date May 4, 2000			

A

MONSANTO

Food • Health • Hope



Dennis P. Ward, Ph.D.
Regulatory Affairs Manager
(636) 737-6631

MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
<http://www.monsanto.com>

B

May 4, 2000

Document Processing Desk (AMEND)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

Attn: James Tompkins, PM 25

Subj: Application to amend labeling, EPA Reg. No. 71995-26

Dear Mr. Tompkins:

Find enclosed our application to amend the label for *Roundup® Weed & Grass Killer Concentrate* (EPA Reg. No. 71995-26). The product was registered in February of 2000 and will be commercialized later this year (*i.e.*, for the 2001 season).

This amended label incorporates revised First Aid statements in accordance with PR Notice 2000-3. It incorporates a change in dilution rate for 'easy to control weeds'. Previously, we recommended a dilution rate of 2 ounces of *Roundup Weed & Grass Killer Concentrate* per gallon of water. To improve product performance, this rate has been raised to 3 ounces per gallon. As a result of this dilution rate change, the product coverage claims in Appendix 2 have been adjusted. The higher rate (for tough established weeds) of 6 ounces per gallon has not been changed.

The following documents are enclosed with this letter:

- Application for Pesticide – Amendment (form 8570-1)
- One copy of an 'edited' label that clearly marks all revisions
- Four unmarked copies of the revised label

05/04/2000

Page -2-

Should you require any additional information regarding this submission please feel free to contact Dr. Russell Schneider in our Washington Office (202-383-2866) or myself directly. Thank you.

Sincerely,



Dennis P. Ward

cc: Russell Schneider / Monsanto

••••

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••••
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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg.
Number:

71995-26

Date of Issuance:

2-9-2000

NOTICE OF PESTICIDE:

 x Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Roundup Concentrate
Weed and Grass Killer₂

Name and Address of Registrant (include ZIP Code):

Monsanto Company, Lawn and Garden Products
600 13th Street, N.W. Suite 660
Washington, DC 20005

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with section 3(c)(7)(A) and (B) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provided that you:

1. Submit/cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.

2. Make the labeling changes listed below before you release the product for shipment.

a. Add the phrase "EPA Registration No.71995-26".

b. The statement "Causes eye irritation" should be changed to "Causes Moderate Eye Irritation".

c. The statement "Reformulation or Repackaging for sale is prohibited" must be changed to read similar to "This is an end-use product. Monsanto does not intend and has not registered it for reformulation or repackaging."

3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

Signature of Approving Official:

Date:

2-9-2000

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of labeling is enclosed for your records.

The Agency has recently revised its recommended First Aid statements for pesticide products and intends to issue a PR Notice announcing the changes in the near future. In the interim we are encouraging registrants to begin using the new statements. The new statements were developed as part of the Consumer Labeling Initiative in close cooperation with poison control center personnel and other medical experts. While it is not mandatory that you revise your label at this time, you are strongly encouraged to substitute the revised statements (below) for those statements currently on the label at your next label printing:

FIRST AID

If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.• Call a poison control center or doctor for treatment advice.
If on skin:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

UKW

[Editorial Notes: Bracketed text [] is for internal use or serves as a 'place holder' for graphics. Parenthetical text () denotes optional wording.]

[Refer to APPENDIX 1 for consolidated list of label claims.]

[Refer to APPENDIX 2 for packaging related claims/instructions]

Roundup® Concentrate Weed & Grass Killer₂

Active Ingredient

Glyphosate, isopropylamine salt 25.0 %

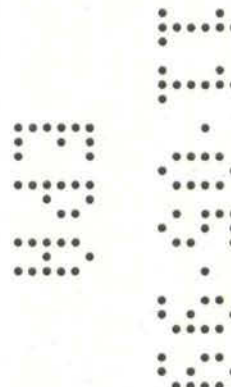
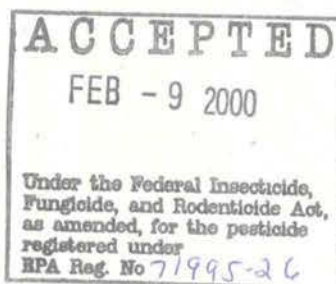
Other Ingredients 75.0 %

KEEP OUT OF REACH OF CHILDREN

CAUTION

See back panel booklet for additional precautionary statements.

(Read precautions and directions on back label.)



Product Facts	
Treats up to [xx sq ft] (approx. size of XX tennis courts) [When calculating number of tennis courts, a tennis court is 2,106 sq ft.]	
KILLS WEEDS	[Illustrate grassy, broadleaf and woody weeds] ALL TYPES OF WEEDS & GRASSES
WHERE TO USE	<ul style="list-style-type: none"> • On patios, walkways, driveways, gravel or mulch beds • Around fruits, vegetables, flowers, shrubs or trees • Along fences • In large areas - For lawn replacement - For garden plot preparation
AMOUNT TO USE	For best results <ul style="list-style-type: none"> • 2 fl oz (4 Tbs) per gallon of water for easy to kill weeds, such as seedlings • 6 fl oz (12 Tbs) per gallon of water for established or tough weeds
[phone icon] Questions, Comments or Medical Information call 1-800-225-2883 www.roundup.com (call 1-888-Roundup)	

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MIXING INSTRUCTIONS

[optional tank sprayer illustration]

Tank Sprayer (plastic, aluminum [fiberglass, plastic-lined steel] or stainless steel)

- For easy to kill weeds such as seedlings add 2 fl oz (4 Tbs) to 1 gallon of water
- For tough established weeds, add 6 fl oz (12 Tbs) to 1 gallon of water
- Spot treat or spray evenly over 300 sq ft.

[optional DNS illustration]

Hose-End Sprayer

For large areas consider using the Ortho Dial 'n Spray®

- Set dial to 5 1/3 or 6 oz.
- To sprayer jar add 6 fl oz (12 Tbs) for each 300 sq ft. **DO NOT** add water.
- Spray evenly over measured area.
- After spraying, unused product can be poured back into its original container.

1 Tablespoon (Tbs) = 3 teaspoons (tsp)

1 fl oz = 2 Tbs

Do not (mix, store or) apply with (in) a galvanized or unlined steel (except stainless steel) sprayer, or through any irrigation system.

To clean sprayer after use, rinse sprayer and all sprayer parts with water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

HOW TO APPLY *[optional illustration]*

- Spray the weeds or grasses you want to kill until thoroughly wet.
- When spot treating weeds around desirable plants, shield plants from drift with a sheet (piece) of cardboard or plastic. If desirable plants are accidentally sprayed, rinse off immediately with water.

IMPORTANT

Do not spray plants or grasses you like - they may die too. Not recommended for spot weed control in lawns since Roundup kills lawn grasses.

WHEN TO APPLY *[optional illustration]*

- Apply when weeds are actively growing. Use anytime weeds and grasses are actively growing.
- For best results, apply during warm, sunny weather (above 60° F) to accelerate systemic movement from foliage to roots.
- Apply when air is calm to prevent drift to desirable plants.
- (RAIN-PROOF:) Rain or watering 2 hours after application will not wash away effectiveness.
- Apply when weeds are small and before seeds form. Established (Hard to kill) weeds may require a repeat application.

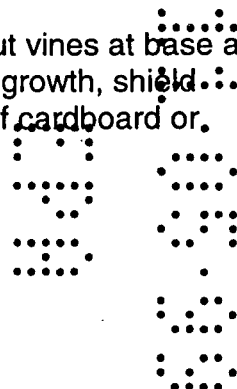
ADDITIONAL TIPS *[optional illustration]*

• To Kill Vines

- If vines are growing up poles, fences, or tree trunks with mature bark, cut vines to a height of 3 to 4 feet and spray vines thoroughly.
- If vines are climbing shrubs or tree trunks with green bark, cut vines at base and treat as directed for stumps or spray regrowth. If spraying regrowth, shield shrubs and green bark from spray drift with a sheet (piece) of cardboard or plastic.

• To Kill Stumps

- Cut living stump close to ground.
- Drive 4 to 5 holes into freshly cut stump.
- Immediately pour undiluted product into holes.



- **For Lawn Replacement**

Use Roundup to kill a (an old) lawn and (its) weeds before planting (a) new lawn.

- Skip one mowing before spraying.
- Use 6 fl oz (12 Tbs) per gallon of water for each 300 sq ft.
- If soil is dry, water before application and 2 to 3 days after application.
- If green patches remain after 7 days, reapply.
- Wait 7 days after last application to rake, till or replant with seed or sod.

(Alternate text)

- Wait 7 days for weeds and lawn to die. Repeat if necessary.
- Rake or till to prepare area for planting seed or sod.

- **Kudzu**

For best results, apply in mid to late summer when vines are mature and actively growing.

- **Wild Blackberry**

Spray anytime plants are actively growing. Dead canes should be cut down and removed. Reapplication is often required to kill deep roots.

- **Poison Ivy & Poison Oak**

Contact with these plants anytime of the year can cause an allergic reaction. Spray anytime plants are actively growing, but at least 4 weeks before the first killing frost in the fall. Reapply, if new growth appears. Handle dead plants with rubber gloves. Dispose of plants and rubber gloves in tightly sealed garbage bags.

- **For Flowerbed & Garden Preparation**

Use Roundup to kill weeds, grasses and brush before planting flowers, fruits, vegetables or herbs.

- If soil is dry, water before application and 2 to 3 days after application.
- Apply evenly over treatment area.
- Wait the number of days indicated below before planting.

WHEN TO REPLANT [optional illustration]
--

- All ornamental flowers, trees and shrubs and the following berries, fruits, vegetables and herbs may be planted **1 day after** application:

Artichoke (Jerusalem), beans (all), beet greens, blackberry, blueberry, boysenberry, broccoli, brussels sprouts, cabbage (all), carrot, cauliflower, celery, chard (Swiss), chicory, collards, cranberry, currant, dewberry, elderberry, endive, gooseberry, horseradish, huckleberry, kale, kohlrabi, leek, lentils, lettuce, loganberry, mustard greens, okra, olallieberry, onion, parsley, parsnips, potato, radish, rape greens, raspberry (black and red), rhubarb, rutabaga, spinach, sweet potato, turnip and yams.

- The following fruits, vegetables and herbs may be planted **3 days after** application: Corn, cucumber, eggplant, garlic, gourds, melons (all), peas (all), peppers (all).

- pumpkin, squash (summer and winter), tomatillo, tomato (by seed) and watercress.
- Tomatoes from transplant and unlisted fruits, vegetables and herbs may be planted **30 days after** application.
 - Lawn grasses may be planted **7 days after** application.

WHEN TO HARVEST *[optional illustration]*

If used to control weeds around fruits or nuts, allow the following number of days before harvesting:

- Citrus (citron, grapefruit, lemon, lime, mandarin, orange, tangelo and tangerine) – **1 day.**
- Nuts (almond, beechnut, cashew, chestnut, hazelnut, pecan, pistachio and walnut) – **3 days.**
- Apple, avocado, banana (plantains), berries (except cranberries), dates, figs, grapes, kiwi fruit, loquat, passion fruit, pear, persimmon, pomegranate and quince – **14 days.**
- Apricot, cherries, nectarine, olives, peach, plum and prunes – **17 days.**
- If used to control weeds around fruit or nut trees, caneberries or grapevines, allow 17 days before harvesting.

HOW IT WORKS *[optional illustration]*

Roundup enters plants through foliage and moves systemically to the roots, killing weeds by stopping the production of a substance found only in plants. Any product (Roundup) not absorbed by plants breaks down into natural materials without moving in or on the soil to untreated plants. Weeds usually yellow and wilt within 2 to 4 days with complete kill in 1 to 2 weeks.

KILLS ALL TYPES OF WEEDS & GRASSES *[optional illustration]*

Weeds (including): Artichoke thistle, beggarweed, black medic, blue mustard, blue toadflax, brassbuttons, broadleaf plantain, burclover, buttercup, Canada thistle, cattail, chickweed, cocklebur, common groundsel, common mullein, common plantain, common ragweed, creeping beggarweed, creeping-charlie, curly dock, dandelion, dog fennel, evening primrose, false dandelion, fiddleneck, field bindweed (wild morningglory), field pennycress, filaree, Florida pusley, garden spurge, henbit, horsenettle, horseradish, horseweed/ marestalk, iceplant, knapweed, knotweed, lambsquarters, lantana, little bittercress, London rocket, mallow, mayweed, milkweed, mouseear chickweed, narrowleaf (buckhorn) plantain, nightshade (silverleaf), oldenlandia, oxalis, Pennsylvania smartweed, pennywort, poison hemlock, prickly lettuce, primrose, prostrate spurge, puncturevine, ragweed, red clover, redroot pigweed, shepherdspurge, smooth catsear, smooth pigweed, sowthistle, spotted spurge, tansy ragwort, tansymustard, teaweed, trumpet creeper, tumble mustard, Virginia creeper, white clover, whitetop, wild barley, wild mustard, wild oats, wild sweet potato, yellow starthistle, and other broadleaf weeds

Grasses (including): Annual bluegrass, annual ryegrass, bahiagrass, barnyardgrass,

bentgrass, Bermudagrass, bromegrass, Cogongrass, crabgrass, creeping bentgrass, dallisgrass, fall panicum, fescue, field sandbur, foxtail, goosegrass, guineagrass, Johnsongrass, Kentucky bluegrass, kikuyugrass, lovegrass, maidencane, nimblewill, nutsedge, orchardgrass, pampas grass, perennial ryegrass, purple nutsedge, quackgrass, sandspur, smooth bromegrass, sprangletop, St. Augustinegrass, tall fescue, Texas panicum, Timothy, torpedograss, vaseygrass, witchgrass, yellow nutgrass, zoysia and other grassy weeds

Brush (Tough Weeds) Unwanted Tress, Shrubs & Vines (including):

Alder, ash, (quacking) aspen, blackberry, bluegum eucalyptus, broom (French, Scotch), buckwheat, ceanothus, chamise, cherry, coyote brush, dewberry, elderberry, elm, eucalyptus, giant reed, hawthorn, hazel, honeysuckle, kudzu, locust, madrone, maple, oak, persimmon, poison oak, poison ivy, poplar, raspberry, sage, sagebrush, salmonberry, saltcedar, sassafras, sumac, sweetgum, tan oak, thimbleberry, tree tobacco, wild rose (multiflora) willow and other tough weeds

[reentry icon] People and pets may enter treated area after spray has dried.

STORAGE AND DISPOSAL [trash can illustration]

STORAGE: Store in original container in a safe place.

DISPOSAL: Empty Container: Put in trash. (Recycle where available.) **Partially Full Container:** Call your local waste disposal service. If local laws permit, put partially full container in trash. Never pour product down any drain.

PRECAUTIONARY STATEMENTS [optional illustration]**HAZARDS TO HUMANS & DOMESTIC ANIMALS**

CAUTION: Causes eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

FIRST AID: IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists. **Note to Physicians:** Emergency Information call 1-800-225-2883 (or 1-888-768-6387).

ENVIRONMENTAL HAZARDS: Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

This product is protected by U.S. Patents No. 4,405,531 and No. 5,703,015. Other patents pending. No license granted under any non-U.S. patent(s).

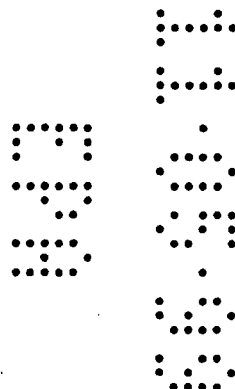
REFORMULATION OR REPACKAGING FOR SALE IS PROHIBITED.

[phone icon] Questions, Comments or Medical Information
call 1-800-225-2883 www.roundup.com
(call 1-888-Roundup)

Roundup is a trademark of Monsanto Company

©[] MONSANTO COMPANY

Manufactured for
Monsanto Company, Lawn & Garden Products
P.O. Box 1750
Columbus, OH 43216
Form [xxx]
EPA Reg. No. 71995-[xxx]
EPA Est. 239-IA-3¹, 58996-MO-1^A
Superscript is first letter of lot number
Made in USA



APPENDIX 1 – Consolidated List of Label Claims

NEW!

NOW!

Tougher formula

40% more concentrated

Stronger

40% stronger

40% stronger to speed absorption to the root

Ultra concentrated formula, 40% more weed killing power

Makes 50% more than before

Economical concentrate formula

Improved extra strength formula

Economical

Concentrated for extra value

More concentrated formula – use less – makes more

More concentrated formula – makes 50% more than before

Ultra formula

Exclusive Roundup formula

Improved formula, completely kills even the toughest weeds and grasses

No odor

Water based formula

RAIN-PROOF™

RAIN-PROOF™ in two hours

Even if it rains – Roundup won't lose its effectiveness

For control that doesn't (won't) wash away

RainFast in hours - enters the plant on contact

Improved formulation -now RainFast - fast uptake

Starts working immediately

Guaranteed same effective results even if it rains within hours

Won't wash off

Won't wash away

Once it enters the plant, it won't wash off

Transorb technology speeds Roundup to the root to kill even tough weeds

Begins absorbing on contact

Speeds absorption to the root for complete kill.

Absorbs on contact, starts working immediately

Absorbed into both broadleaf and grassy weeds

Works only when absorbed by the foliage of weeds

Visible results in 2 to 4 days

Visible effects are gradual wilting and yellowing advancing to complete browning and root destruction.

Before [*weed graphics*] / After [*weed graphics*]

Kills unwanted weeds and grasses, roots and all

Kills more weeds in more places.

Kills (to) the root

Kills weeds, roots and all

Kills the weed you see and the root you don't

Kills the roots of (both) broadleaf and grassy weeds

Kills existing weeds only, no residual activity in soil

Roundup kills weeds and grasses in – Patios – Driveways – Sidewalks – Gardens and other non-lawn areas.

Kills weeds in flowerbeds, around trees, shrubs and fences, and on patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard.

(Roundup) Kills the weed you see and the root others leave behind

Kills the root so weeds don't come back

No root. No weed. No problem.

Kills over 100 weeds

For general weed control - kills weeds and grasses in 2 to 4 weeks - roots and all

Kills almost all (annual and perennial) weeds, grasses and other unwanted plants

Approved for most (many) lawn and garden uses.

Multipurpose grass and broadleaf weed control

Does not have soil activity

Now a shorter wait for replanting!

Use for large jobs like garden plot preparation and lawn replacement (renovation)

Use to prepare sites: for large plantings, for planting flowerbeds, fruit trees, ornamentals, vegetables and gardens, and for renovating lawns

Can be used for habitat restoration, controlling exotic vegetation, and for site preparation of wildlife food plots.

Use around fruits and vegetables.

Can be used around (small) fruits and vegetables.

Spray weeds (Use) in flowerbeds, around trees, shrubs and around fences, and on patios, paths, sidewalks, sidewalk cracks, walkways, driveways, and other areas in your yard.

Also use for large jobs such as lawn renovation and vegetable and flower garden preparation.

Can reseed or sod lawns 7 days after treatment.

Lawns and gardens can be reseeded or planted soon after treatment.

Ornamental gardens can be reseeded or planted 1 day after treatment.

(Use) For General Weed Control: Use along fences, paths, patios, sidewalks and driveways, around trees, shrubs, ornamental plantings, flowerbeds, and buildings, and in brick and gravel walkways. Use to trim and edge landscape areas.

(Use) For Spot Spraying: Use in and around flowerbeds, ornamental, fruit and nut trees, grapevines, shrubs, fences, driveways and walkways.

(Use) For Landscaping: Use to prepare areas for planting of ornamentals, trees, shrubs, desert landscapes, rock gardens, flowerbeds or similar plantings.

(Use) For Wildlife Areas: Use to prepare areas for planting wildlife food. Exotic or undesirable plants can be controlled to allow for planting or recovery of native plant species. Spot treatments can be made to selectively remove unwanted plants.

(Use) For Lawn Renovation

(Use) For Brush Control

(Use) For Stumps

Covers up to 300 sq ft per gallon of spray

Make only what you need

(Use in) Apply with a Big Shot™ Multi-Purpose Sprayer or other tank sprayer, Ortho Dial 'n Spray® or other hose-end sprayer, or a (hand held) trigger sprayer

Easy to apply with an Ortho Dial 'n Spray®, hose-end, tank or (hand held) trigger sprayer

Use to refill Roundup Ready-To-Use containers

Works first time, every time

Satisfaction guaranteed or your money back with proof of purchase

Satisfaction guaranteed or we will gladly refund purchase price

Dead Weeds Guaranteed

Dead Weeds Guaranteed or Your Money Back

[Promotional options]

Save up to \$[x] on (your) next purchase

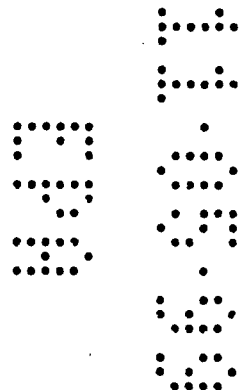
Free weed guide inside

Free [] with this purchase of Roundup concentrate quart

FREE REFILL

FREE SAMPLE

SAMPLE NOT FOR SALE



APPENDIX 2 – Packaging Related Claims

NET 6 fl oz (177 mL)
 16 fl oz (1 pt) (473 mL)
 32 fl oz (1 qt) 946 mL
 53.7 fl oz (0.42 gal) (1.5 L)
 64 fl oz (1/2 gal) (1.89 L)
 128 fl oz (1 gal) (3.79 L)

[corner flap]

OPEN

Resealable Label for Directions & Precautions

PULL HERE TO OPEN LABEL

PEEL HERE

PEEL OPEN FOR USE DIRECTIONS AND FURTHER INFORMATION

PRESS TO RESEAL

[Pint]

Now makes 8 gallons

Mix with water to make 8 gallons of spray solution

Covers up to 2,400 sq ft

Mix with water to cover up to 2,400 sq ft

[Quart]

Now makes 16 gallons

Mix with water to make 16 gallons of spray solution

Covers up to 4,800 sq ft

Mix with water to cover up to 4,800 sq ft

[0.42 Gallon] Now makes 26 gallons

Mix with water to make 26 gallons of spray solution

Covers up to 7,800 sq ft

Mix with water to cover up to 7,800 sq ft

[Half Gallon] Now makes 32 gallons

Mix with water to make 32 gallons of spray solution

Covers up to 9,600 sq ft

Mix with water to cover up to 9,600 sq ft

[Gallon]

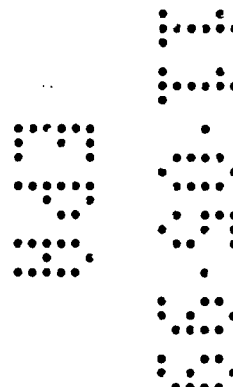
Now makes 64 gallons

Mix with water to 64 gallons of spray solution

Covers up to 19,200 sq ft

Mix with water to cover up to 19,200 sq ft

New! Larger size, covers up to [xx] sq ft



DATE Jan. 03, 2000

SUBJECT: EP [x] MP [] PRODUCT CHEMISTRY REVIEW
DP BARCODE No.D261342 Reg./File Symbol No. 71995-EA
PRODUCT NAME Roundup Concentrate Weed&Grass Killer 2
COMPANY Monsanto

FROM *AS* Alfred Smith, Chemist
Technical Review Branch/RD (7505C)

TO: Vickie Walters, PM 25
Herbicide Branch/RD(7505C)

INTRODUCTION

The Applicant requests the registration of the End-Use Product (EP), Roundup Concentrate Weed&Grass Killer 2. Labelling and product chemistry information are submitted in support of the registration.

FINDINGS

1. The Labelling satisfies the requirements of 40 CFR 156.10 with respect to the Ingredient statement and the Storage and Disposal statements.

2. The product chemistry information satisfies the requirements of 40 CFR 158.155 - 158.190 for the EP.

CONCLUSIONS

TRB/RD concludes that the product chemistry information satisfies the registration requirements for the proposed End-Use Product, Roundup Concentrate Weed&Grass Killer 2.

EP [x] MP [] PRODUCT CHEMISTRY REVIEW

1. DP BARCODE No.: D261342 2. Reg./File Symbol No.: 71995-EA
3. Registration [x] 4. Reregistration [], Rereg Case No. _____
5. Product Name: Roundup Concentrate Weed&Grass Killer 2
6. Pesticide Type: Fungicide [] Herbicide [x]
Insecticide [] Rodenticide [] Antimicrobial []
Plant Growth Regulator [] Others: _____
7. Uses: Food [x] Non food use []
8. Type of Submission: New [x] Resubmission [] Amendment []
"ME-TOO" [] Alternate Formulation [] Repack []
Experimental Use Permit [] Other (Specify) _____
9. If "Me-TOO" Registration, this product is [] is not []
identical or substantially similar to EPA's Reg. No. _____

If not, comment in Confidential Appendix A on the differences between the registered and the new source where significant.

CONFIDENTIAL STATEMENT OF FORMULA, DATED 06/23 /1999 :

10. Type of formulation and the sources of active ingredients:
 - a. Non-integrated formulation system.....[x]
 - b. Are all technical grade active ingredients used
registered? • yes [x] • no []
 - c. Integrated formulation system.....[]

11. Composition: The nominal concentrations (NC) of the active ingredients and the upper and lower certified limits (UCL & LCL) are as follows:

Active ingredient(s)	% by weight		
	NC	UCL	LCL
N-Phosphonomethylglycine, IPA salt	25.0	25.75	24.25

12. The calculated NCs, based on the pure active ingredients (PAI), are identical to those on the label:

• yes [x] • no []

13. The certified limits are within the standard limits as per 40CFR§158.175 or are adequately explained if different:

• yes [x] • no []

14. Clearance of intentionally added ingredients in the formulation for the intended use:

a. Formulation intended for food use under 40CFR§180.1001:

• yes [x] • no [] • Some are cleared, others are not []

• Cleared under list: • c [x] • d [x] e []

b. Formulation intended for non-food use:

• yes [x] • no [] • Some are cleared, others are not []

15. For products produced by an integrated formulation system:
- All impurities of toxicological significance have an UCL:
 - yes [] • no [] • not applicable []
 - All other impurities $\geq 0.1\%$ associated with the active ingredient in the product are reported at their nominal concentrations:
 - yes [] • no [] • not applicable []

PRODUCT LABEL, EPA RECEIVED 11/05 /1999 :

16. The active ingredients statement (chemical identities, nominal concentrations) is consistent with the CSF • yes [x] • no []
17. The formulation contains one of the following:
- 10% or more of a petroleum distillate: • yes [] • no [x]
 - 1% or more of methyl alcohol: • yes [] • no [x]
 - sodium nitrite at any level: • yes [] • no [x]
 - a toxic List 1 inert at any level: • yes [] • no [x]
 - arsenic in any form: • yes [] • no [x]
18. If yes to any of the above, does the inert ingredients statement contains a footnote indicating this?
- yes [] • no [] • not applicable []
19. The appropriate physical and chemical hazards statement regarding flammability or explosive characteristics of the product are given on the label:
- yes [] • no [] • not applicable [x]
20. The storage and disposal instructions for the pesticide and container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses:
- yes [x] • no []

PRODUCT CHEMISTRY DATA (SERIES 830.0000)

21. <u>Chemical IDs/Manufacture/ Analytical Information</u>	<u>Data Required Fulfilled</u>	<u>MRID No.</u>
830.1550 Chemical Identity	Y	44965501
830.1600 Starting Materials 830.1650 Formulation Process	Y	" "
830.1670 Discussion of Impurities	Y	" "
830.1700 Preliminary Analysis	NA	
830.1750 Certified Limits	Y	44965501
830.1800 Enforcement Analytical Method	Y	" "

PRODUCT CHEMISTRY DATA (SERIES 830.0000)

24. <u>Physical/Chemical</u>	<u>Pro</u> <u>per</u> <u>tie</u> <u>s</u>	<u>Data</u> <u>Required</u> <u>Fulfilled</u>	<u>Value or</u> <u>Qualitative</u> <u>Description</u>	<u>MRID No.</u>
830.6303 Physical State		Y	Liquid	44965501
830.7300 Density/Bulk Density		Y	9.16 lbs/gal	" "
830.7000 pH of Product		Y	4.7	" "
830.6315 Flash Point		Y	>200 F	" "
830.6315 Flame Extension		NA		
830.6316 Explodability		NA		
830.6317 Storage Stability		In Progress		44965501
830.7100 Viscosity		Y	9 Cps	" "
830.6319 Miscibility (With Hydrocarbon solvents)		NA		
830.6320 Corrosion Characteristics		In Progress		44965501
830.6321 Dielectric Breakdown Voltage		NA		

Explanations: Y = The Requirements Were Fulfilled; N = The Requirements Were Not Fulfilled; NA = Not Applicable; G = Data Gap; U = Requires Upgrading; I = Incomplete or In Progress; W = Waived.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND
TOXIC SUBSTANCES

TECHNICAL REVIEW BRANCH
SIMILARITY CLINIC DETERMINATION

16/DEC/1999

Subject: EPA Reg. No./File Symbol: 71995-EA Roundup Concentrate Weed &
DP Barcode: D261343 Grass Killer
Case No: 065090
PC Code: 103601

From: Eugenia McAndrew, Biologist *EM*
Technical Review Branch *scr*
Registration Division (7505 C)

To: Vickie Walters, PM Team 25
Herbicide Branch
Registration Division (7505 C)

Applicant: Monsanto Company
Lawn & Garden Products
700 Chesterfield Village Parkway No.
St. Louis, MO 63198

ACTION REQUESTED: TRB has been asked to determine if File Symbol 71995-EA, Roundup Concentrate Weed & Grass Killer 2, is substantially similar to EPA Reg. No. 524-475, Roundup Ultra Herbicide.

BACKGROUND: Monsanto has submitted an application for registration of a new pesticide end-use formulation identified as Roundup Concentrate Weed & Grass Killer 2, File Symbol 71995-EA. Monsanto requests " that the Agency allow the use of previously submitted acute toxicity and irritation studies with MON 77360 to support this application. The Monsanto formula, MON 77360, is currently registered as Roundup Ultra Herbicide, EPA Reg. No. 524-475, Alternate formulation. "

MON 77360 is a water-based formulation containing 41% glyphosphate-isopropylamine, 14.5% surfactant and [REDACTED] Roundup Concentrate Weed & Grass 2 is an aqueous dilution of MON 77360 with 25% glyphosphate-isopropylamine and a preservative added.

The Agency reviewed a six-pack of acute toxicity studies for the cited product in a memo dated January 28, 1994. The studies were classified as acceptable and toxicity categories were assigned to the product.

Note to PM: Monsanto originally requested that two cited products be considered for this similarity determination (# 524-475 and # 71995-18). It is TRB's policy to use only one cited product and therefore, we chose EPA Reg. No. 524-475 because we were able to locate the original toxicity reviews.

RECOMMENDATIONS: We have evaluated the formulations of File Symbol 71995-EA and EPA Reg. No. 524-475 and have found them to be toxicologically similar. The new product will be assigned the same toxicity profile as the cited product as follows:

acute oral toxicity	IV	cited
acute dermal toxicity	IV	cited
acute inhalation toxicity	IV	cited
primary eye irritation	III	cited
primary skin irritation	IV	cited
dermal sensitization	No	cited

LABELING: Based on the toxicity profile above, the following are the precautionary and first aid statements for this product according to the Label Review System.

Date: 12/16/99 LABEL REVIEW SYSTEM

ID # 071995-00026 Roundup Concentrate Weed & Grass Killer 2

SIGNAL WORD: CAUTION

PRECAUTIONARY STATEMENTS:

Causes moderate eye irritation. Avoid contact with eyes or clothing.
Wash hands before eating, drinking, chewing gum, using tobacco or
using the toilet.

STATEMENT OF PRACTICAL TREATMENT (SOPT):

IF IN EYES: Hold eye open and rinse slowly and gently with water for
15-20 minutes. Remove contact lenses, if present, after the first 5
minutes, then continue rinsing. Call a poison control center or
doctor for treatment advice.

Roundup® Concentrate Weed & Grass Killer₂
(EPA Reg. No. 71995-~~EA~~)

SUPPLEMENTAL INFORMATION

Monsanto requests that the Agency allow the use of previously submitted acute toxicity and irritation studies with MON 77360 to support this application for registration of *Roundup Concentrate Weed & Grass Killer₂*. These studies and their MRID numbers are listed in the Data Matrix. The Monsanto formula, MON 77360, is currently registered as *Roundup Ultra Herbicide* (EPA Reg. No. 524-475, Alternate Formulation) and *Roundup Rainfast Super Concentrate Weed & Grass Killer* (EPA Reg. No. 71995-18, Alternate Formulation C —formerly EPA Reg. No. 239-2654).

MON 77360 is a water-based formulation containing 41% glyphosate-isopropylamine, 14.5% surfactant and [REDACTED] *Roundup Concentrate Weed & Grass Killer₂* is simply an aqueous dilution of MON 77360 with a preservative added. The replacement of active ingredient and surfactant with water would simply dilute its toxicity and irritation potential.

Label toxicity categories assigned to the studies conducted with MON 77360 are as follows:

Acute Oral Tox	- IV ✓	Ocular Irritation	- III ✓
Acute Dermal Tox	- IV ✓	Skin Irritation	- IV ✓
Acute Inhalation Tox	- IV ✓	Dermal Sensitization	- Negative ✓

Draft labeling submitted in support of this application for registration of *Roundup Concentrate Weed & Grass Killer₂* carries a CAUTION signal word and precautionary language for eye irritation.

Copies of the following Confidential Statements of Formula are being submitted to aid in the Agency's consideration of this request:

- CSF for Roundup Ultra Herbicide, Alternate Formulation (EPA Reg. No. 524-475)
- CSF for Roundup Rainfast Super Concentrate Weed & Grass Killer, Alternate Formulation 'C' (EPA Reg. No. 71995-18, formerly 239-2654)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION,
PESTICIDES AND TOXIC SUBSTANCES

21/DEC/1998

MEMORANDUM

Subject: EPA Reg. No: 524-475 Roundup UltraDry Herbicide
DP Barcodes: D251014
Case No: 290680

From: Masih Hashim, Toxicologist /s/**Masih Hashim**
Technical Review Branch **JCR**
Registration Division (7505C)

To: Vickie Walters, PM Team 25
Herbicide Branch
Registration Division (7505C)

Applicant: Monsanto Agricultural Company
600 13th Street, N.W., Suite 660
Washington, D.C. 20005

FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
103601 Glyphosate, isopropylamine salt	41.0
<u>Inert Ingredient(s)</u>	<u>59.0</u>
Total:	100.0

BACKGROUND: Monsanto Company has submitted an eye irritation study MRID # 446876-01 to support the registration of Roundup Ultradry Herbicide, # 524-475. The study was conducted at the Institute of Toxicology, Keszthely, Hungary.

RECOMMENDATIONS: The cited eye study (446876-01) is not acceptable for the following reasons:

1. The procedural details were not followed (EPA/OECD) particularly applying the test substance to the eye was substantially different. This deviation has affected the outcome of the study.
2. The summary page indicates "One animals exhibited irreversible lesions of conjunctivae and cornea". The study was terminated in 7 days (instead of 14). This again affected the outcome of the study.

primary eye irritation - unacceptable

LABELING:

Not provided for this action.

DATA REVIEW FOR PRIMARY EYE IRRITATION TESTING (870.2400)

Product Manager: 25
MRID No.: 446876-01

Reviewer: Masih Hashim
Study Completion Date: not given
Study No.: not given (test code GL4-97-405/N)

Testing Facility : Institute of Toxicology, Keszthely, Hungary
Author: unknown

Quality Assurance (40 CFR §160.12): Included

Test Material: Round Up Ultra US
Dosage: 0.1 cc
Species: Rabbits; Albino, New Zealand White

Conclusion:

1. **Toxicity Category:** -
2. **Classification:** unacceptable

Procedure (including deviations): The test substance was held in the eyes more than the required time, this might have caused an error in the results. The study was terminated in 7 days while the results were still positive.

Observations	Number "positive"/number tested					
	Hours					
	1	24	48	72	day 4	day 7
Corneal Opacity	0/5	1/5	1/5	1/5	1/5	1/5
Iritis	3/5	2/5	1/5	0/5	0/5	0/5
Conjunctivae: (reading of 2 or more as positive)						
Redness	2/5	4/5	3/5	3/5	2/5	1/5
Chemosis	4/5	3/5	3/5	1/5	1/5	0/5
Discharge	5/5	4/5	2/5	1/5	1/5	0/5

Summary: All lesions subsided by day 7, except corneal opacity which remained through day 7. The expt. was terminated on day 7. The test substance is corrosive, if the study was acceptable.

ACUTE TOX ONE-LINERS

1. DP BARCODE: D251014
2. PC CODE: 103601
3. CURRENT DATE: Dec. 21, 1998
4. TEST MATERIAL: Roundup Ultra US

Study/Species/Lab Study #/Date	MRID	Results	Tox. Cat.	Core Grade
Primary eye irritation/ rabbit/ Institute of Toxicology/test code GL4-97-405/N /11-28- 97	446876-01	corrosive	-	U

Core Grade Key: A =Acceptable, S = Supplementary, U = Unacceptable, V = Self Validated

July 10, 1995

Note to Robert Taylor/Vicki Walters

Russ Schnieder called this morning to determine the status of their request for reclassification of the inhalation toxicity of 524-475. This data package, D204318, was inadvertently left in our regular queue, when it should have been in our priority queue. We have only a 3 month backlog for simple questions, rebuttals, single studies, etc. This request was to reclassify the inhalation to Category IV based on a revision in inhalation categories. We concur with their request. The LC_{50} of >3.3 mg/L would put the product in Category IV for inhalation toxicity.

Tina Levine
308-8393

MEMORANDUM:

Subject: EPA File Symbol/EPA Reg. No.: 524-UTL
Mon 65005 Herbicide

From: Lucy D. Markarian, Biologist *11/13/94*
Precautionary Review Section
Registration Support Branch
Registration Division (7505W)

To: Robert J. Taylor, PM 25
Fungicide-Herbicide Branch
Registration Division (7505C)

Thru: Thomas C. Ellwanger, Section Head
Precautionary Review Section
Registration Support Branch
Registration Division (7505W)

Applicant: Monsanto Agricultural Co.
800 N. Lindbergh Blvd.
St. Louis, MO 63167

*Mary Waller
for T.E.
11/28/94*

FORMULATION FROM LABEL:

<u>Active Ingredient(s)::</u>	<u>% by wt.</u>
Glyphosate, N-(Phosphonomethyl) glycine	41.0 %
isopropylamine salt	
<u>Inert Ingredient(s):</u>	
.....	59.0 %
Total:	100.0 %

2

BACKGROUND

Monsanto has applied for the registration of a liquid Glyphosate herbicide that is developed with a new surfactant under EPA symbol 524-UTL. This formulation is stated to be less irritating to the eyes and that it could be registered under the signal word CAUTION. Six studies are submitted to support the registration.

RECOMMENDATION

Acute Dermal - core minimum

1. All animals in any given test should be from the same source.
2. When applying the test material, the gauze that covers the application site is generally 2 ply gauze. The purpose of this is to provide a reservoir of test material constantly in touch with the skin. An 8 ply covering would primarily absorb the test material and not serve as a reservoir. It is recommended that only two ply gauze be used in the future.

Acute inhalation - Core minimum

Although the chamber parameters are given, the instruments used or if these instruments were calibrated are not disclosed. The record of the temperature, humidity, and air flow is not included in the report.

The test is accepted with an estimation of the LC_{50} value of >3.3 mg/l. According to the guidelines the 95 % confidence limits should be within 20 % of the calculated LD_{50} . Limits ranging of 0.0 - infinity, or 2.9 - infinity are not meaningful or acceptable.

Eye Irritation - Core Minimum

At 24 hrs staining due to mechanical abrasion is reported in 2 animals. One in both eyes and one in the control eye only. The reason for this mechanical injury is not documented. This test is supposed to show that this new formulation is not irritating to the eyes as was the previous formulation. The staining is not even continued to show that at least the injury healed within 7 days, especially in the test eye. It is very unusual for both eyes to be abraded at the same time, and it is unusual that two rabbits out of six to suffer mechanical injury to the eye.

This test was conducted with a different lot than the other tests in the set. The reason for the change is not clear.

Dermal Irritation - Core minimum

It is stated that Quality Assurance did not inspect any part of the conduct of the test. According to 40 CFR as a minimum some part of the conduct of the test must be inspected to satisfy the quality assurance requirement. PRS has accepted the test as core minimum data, because it appears that there were two independent evaluations. This assures us that at least the test was evaluated correctly. In future tests without QA inspection of the conduct of the tests cannot be accepted.

Dermal Sensitization - Core Minimum

The Quality Assurance statement does not indicate that the conduct of this test was inspected at any time. The inspection of the rooms or the inspection of the final report does not assure the quality of the actual conduct of the test. PRS would be reluctant to accept tests that do not have this assurance in the future.

In the test group, at challenge there were sufficient number of \pm reactions (5) that made a rechallenge desirable. There were three more animals in the test group than the naive control group showing such borderline reactions. \pm responses are considered negative, therefore the test was accepted, but the results would have been less equivocal had rechallenge been made.

The referenced positive tests were not conducted within the acceptable time frame, because they were conducted more than six months prior to the presented test. Additionally, the concentrations used 0.5 % for induction and 0.1 or 0.3 % for elicitation are rather high for such purposes, because DNCB has been found to be irritating at these concentrations. Buehler has successfully used 0.1 or 0.08 % for induction and 0.05 or 0.03 % for elicitation. These concentrations are published and are generally used.

Any referenced positive control must be conducted, at most, within six months of the presented study and the results of the test as well as including induction and elicitation concentrations. The referenced tests were conducted from 9/90 to 12/92. The presented study was terminated 6/19/93. PRS has assumed that at least one test was conducted in December of 1992 that could possibly be acceptable.

LABELING

The signal word is CAUTION as it appears on the proposed label.

The precautionary statement needs no reference to skin, because dermal toxicity and irritation are placed in category IV. However, if the registrant chooses to retain category III labeling that is acceptable.

THU

4

In the statement of practical treatment revise 'If inhaled' statement to read:

If inhaled: Remove victim to fresh air, If not breathing give *mw* artificial respiration, preferably mouth to mouth. Get medical attention.

5-

DATA REVIEW FOR ACUTE DERMAL TOXICITY TESTING (§81-2)

Product Manager: 25 **Reviewer:** L. Markarian
MRID No.: 430359-01 **Report Date:** 10/22/93
Testing Laboratory: Springborn Laboratories **Report No.:** 3044.442
Author(s): Kimberly L. Bonnette SB-93-127
Species: Rat, Sprague Dawley
Weight: M 273 - 283 g, F 237 - 281 g
Source: Charles River Laboratories, Portage MI and Raleigh NC
Test Material: Mon 65005, Lot LUL-9304-5170-F, dark amber liquid
specific gravity 1.19 g/ml
Quality Assurance (40 CFR §160.12): Included

Summary:

1. The estimated LD₅₀ is > 5000 mg/kg
3. Tox. Category: IV Classification: Core minimum

Procedure (Deviation From §81-2):

Undiluted test material was applied to the clipped dorsum of the animals on approximately 10 % of the body surface. The site was covered with 2 X 3 inch 9 ply gauze secured with tape. The trunks of the animals were wrapped in plastic sheet and overwrapped with elastic wrap. At 24 hrs the bandages were removed and any residue was removed with wet gauze. Observations were twice on the day of application and daily thereafter. Body weights were recorded at initiation and on days 8 and 18. CO₂ euthanasia was used. Necropsy was performed on all animals.

Results:

Reported Mortality

DOSAGE	(NUMBER KILLED/NUMBER TESTED)		
	Males	Females	Combined
5000 mg/kg	0/5	0/5	0/10

Symptoms & Gross Necropsy Findings:

There was no mortality. Mild to moderate erythema and mild edema was observed on all animals. Other observations included dark material around the facial area and urine stains. The females showed either no gain in body weight or weight loss during the first week of observations. All animals showed weight gain during the second week

6

DATA REVIEW FOR ACUTE ORAL TOXICITY TESTING (§ 81-1)

Product Manager:25

MRID No.: 430209-02

Testing Facility:Springborn Laboratories

Author(s):Kimberly L. Bonnette

Species:Rat, Sprague Dawley

Age:young adult

Weight:M 198 - 218 g, F 199 - 215 g

Source:Charles River Laboratories, Portage MI.

Test Material:MON 65005, Lot LUL-9304-5170-F, dark amber liquid

Specific gravity 1.19 g/ml

Quality Assurance (40 CFR §160.12):Included

Reviewer: L. Markarian

Report Date:10/22/93

Report No.:3044.441

SB-93-126

Conclusion:

1. The estimated LD₅₀ is > 5000 mg/kg
3. Tox. Category: IV Classification: Guideline

Procedure (Deviations from §81-1):

Fasted animals were intubated with the test material as received. Observations were made twice on the day of intubation and daily thereafter. There were twice daily mortality checks. Body weights were recorded on days -1, 1, 8 and 15. Necropsy was performed on all animals.

Results:

Dosage	(Number Killed/Number Tested)		
	Males	Females	Combined
5000 mg/kg	0/5	0/5	0/10

Symptoms & Gross Necropsy Findings:

There was no mortality. Signs of toxicity included decreased activity, urine and/or fecal stains, soft stools/diarrhea, decreased defecation, Rough coat, dehydration and dark material around the facial area.

Necropsy revealed enlarged cervical lymph nodes in 3/10. There was no other gross pathology

7

DATA REVIEW FOR ACUTE INHALATION TOXICITY TESTING (§81-3)

Product Manager:25
MRID No.: 430209-03
Testing Laboratory:Monsanto Environmental Health Laboratory
Report No.:EHL 93053
Author(s):Charles L. Bechtel
Species:Rat, Sprague Dawley
Weight:Males 288-310 g, Females 202-227 g
Source:Charles River Breeding Laboratory, Portage MI
Test Material:Mon 65005 Lot LUL-9394-5170-F
Quality Assurance (40 CFR §160.12):Included

Reviewer: L. Markarian

Report Date:11/2/93

Summary:

1. **LC₅₀ (mg/kg):** Males = 3.5 (0.0 - infinity)
Females =10.9 (0.0 - infinity)
Combined =4.2 (2.9 - infinity)
2. **The estimated LC₅₀ is > 3.3 mg/L**
3. **Mean Concentration:**1.5, 3.3, and 3.8
4. **Tox. Category:** III **Classification:** Core minimum

Procedure (Deviation From §81-3):

The four hour, nose only exposure was in an 80 L stainless steel chamber with two tiers of restrainer tube ports. The test atmosphere was introduced into the chamber from the bottom and exhausted from the top.

It is stated that air flow, temperature and humidity were recorded at approximately 30 minute intervals. The mean values with standard deviation are provided, but no record of this or the instruments used, and if they were calibrated is included.

From the included diagrams it is assumed that a flowmeter was used for the compressed air and there was a dry test meter for measuring the air flow at the port where the test atmosphere was introduced into the chamber.

The test atmosphere was generated by placing a Laskin nebulizer in the bottom port of the chamber supplied with pressurized air and test material (from an adjustable flow valveless pump). The concentration of the aerosol was controlled by adjusting the flow rate of the pump.

Chamber concentrations were measured by sampling four times during each exposure from the breathing zone at the rate of 2.0 lpm, and impinging in acetone in 25 ml glass impingers. Total volume withdrawn per sampling was 10 L. HPLC was used for analysis.

Particle size analysis was made twice during each exposure using an Andersen Cascade impactor by sampling from the breathing zone at

28.3 lpm.

During exposure the animals were observed at hourly intervals, although this was limited due to animals being in restrainer tubes. The animals were observed at the end of the exposure and daily thereafter. There were twice daily mortality checks.

Body weights were recorded at initiations and on days 2, 7 and 14. Necropsy was performed on all animals.

Results:

Chamber Concentration mg/l

Analytic

1.5

3.3

3.8

Range

1.3-1.6

2.8-5.1

3.4-4.3

MMAD \pm SGD μ m

Average

3.3

3.8

3.7

Range

3.2-3.4

3.7-3.9

3.7

% under 2.1 μ m

27

20

21

Chamber

Temperature $^{\circ}$ C

22 \pm 0.1

22 \pm 0.4

22 \pm 0.3

Humidity %

50 \pm 1.1

62 \pm 3.5

40 \pm 6.2

Air flow LPM

76 \pm 3.0

29.8 \pm 0.4

29.5 \pm 0.4

Mortality

Male

0/5

1/5

4/5

Female

1/5

1/5

2/5

Signs of Toxicity

Hypoactivity, labored respiration, gasping, high pitched sounds, respiratory rattle, perinasal and periocular encrustation. Labored respiration and respiratory rattle persisted to day 14 in some animals. There was weight loss on day 2. At termination all animals showed good gains in body weight.

Necropsy Findings

At 3.3 mg/l one male showed an enlarged liver and another dark foci on the lungs. A third male showed abnormal discharge and encrustation of the nasal turbinates. No gross pathology was observed in the females.

9

DATA REVIEW FOR ACUTE EYE IRRITATION TESTING (§81-4)

Product Manager:25

MRID No.: 430209-04

Testing Laboratory:Springborn Laboratories

Author(s):Kimberly L. Bonnette

Species:Rabbit, New Zealand White

Sex:4 M and 2 F

Weight:2.5 - 3.5 K

Source:Mohican Valley Rabbitry, Loudonville, Ohio

Dosage:0.1 ml.

Test Material:MON 65005, Lot RUD-9211-4635-F, Amber liquid

Quality Assurance (40 CFR §160.12):Included

Reviewer: L. Markarian

Report Date:8/2/93

Report No.:3044.401

SB-92-510

Summary:

1. **Toxicity Category:**III
2. **Classification:**Core minimum

Procedure (Deviations From §81-4):

Undiluted test material was instilled in the conjunctival sacs of six preexamined eyes. Observations were at 1, 24, 48, 72 hrs and days 7 and 10. Fluorescein was used to confirm corneal findings.

Results:

Observations	(number "positive"/number tested)							
	Hour	Days						
	1	1	2	3	7	10		
Cornea Opacity	0/6	0/6*	0/6	0/6	0/6	0/6		
Iris	6/6	2/6	0/6	0/6	0/6	0/6		
Conjunctivae								
Redness	6/6	6/6	6/6	3/6	0/6	0/6		
Chemosis	6/6	6/6	0/6	0/6	0/6	0/6		
Discharge	5/6	2/6	0/6	0/6	0/6	0/6		

* positive staining is reported attributed to mechanical abrasion.

DATA REVIEW FOR SKIN IRRITATION TESTING (§81-5)

Product Manager:25

Reviewer: L. Markarian

MRID No.: 430359-02

Report Date:10/22/93

Testing Laboratory:Springborn Laboratories

Report No.:4044.443

Author(s):Kimberly L. Bonnette

Species:Rabbit, New Zealand white

Age:young adult

Sex:4 male and 2 female

Weight:2.1 - 2.5 K

Dosage:0.5 ml

Test Material:MON 65005, Lot LUL-9304-5170-F

Quality Assurance (40 CFR §160.12):GLP included, QA inspection did not include the conduct of the test.

Summary:

1. The Primary Irritation Index =0.63
2. Toxicity Category:IV
3. Classification: Core minimum

Procedure (Deviations From §81-5):

Undiluted test material was applied to the clipped skin of the animals, covered with 4 ply gauze pad (1 X 1 inch)secured with tape. The trunks of the animals were wrapped in elastic tape. At 4 hrs the bandages were removed and the sites wiped free of any residue with moist gauze. Evaluations were at 1, 24, 48, 72 hrs and day 7 according tom Draize. Although the text of the report does not indicate it appears that evaluation was made by two individuals independently.

Results:

	H	O	U	R	S	
	1			24	48	72
Erythema						day 7
grade 1	5/6		3/6	2/6	2/6	0/6
2	1/6					
Edema						
grade 1	2/6					

Both readings were in fairly close agreement

Special Comments:

DATA REVIEW FOR SKIN SENSITIZATION TESTING (§81-6)

Product Manager: 25
MRID No.: 430359-03
Testing Laboratory: Springborn Laboratories
Author(s): Kimberly L. Bonnette
Species: Guinea Pig, Hartley
Weight: 342 - 413 g
Source: Harlan Sprague Dawley, Indianapolis Indiana
Test Material: MON 65005 lot LUL-9304-5170-F, Dark amber liquid
Positive Control Material:
Quality Assurance (40 CFR §160.12): GLP statement included. Quality assurance does not indicate inspection of the conduct of the test

Reviewer: L. Markarian
Report Date: 10/22/93
Report No.: 3044.444
SB-93-129

Method: Buehler

Summary:

1. This Product is not a dermal sensitizer.
2. Classification: Core minimum

Procedure (Deviation From §81-6):

A pre test screening was made for the definition of the induction and elicitation concentrations. Four guinea pigs and four concentrations, 100 % and aqueous dilutions at 75, 50, and 25 % were used. 100 % showed two grades of + and two grades of 0 at 24 hrs and one grade + and three grades of 0 at 48 hrs. Induction and elicitation were conducted at 100 %.

There were two groups of ten animals, one test and the other naive control.

Inductions were made on clipped skin, using 0.4 ml aliquots on 2 X 2 cm Webril patches backed with adhesive tape. The trunks of the animals were wrapped in elastic tape secured with tape. At six hours the wrappings were removed and any residue was removed with moistened gauze (distilled water). There were three inductions made one week apart. Challenge was two weeks after the last induction. Challenge applications were made in similar manner; however the skin was depilated prior to the evaluation of the challenge results. Evaluations were according to Buehler.

Reference is given to positive control studies conducted with DNCB from September of 1990 to december 1992, and stating that their DNCB sensitization has been 97 % successful when induced at 0.5 % and elicited at 0.1 or 0.3 %.

Results:

After the first induction application no reaction was observed. Following the second and third inductions sporadic + reactions were observed.

12

Following challenge there were 4/10 \pm reactions at 24 hrs, and 5/10 \pm reactions at 48 hrs. In the naive controls there was 1/10 \pm reaction at 24 hrs and 2/10 \pm reactions at 48 hrs. There was no rechallenge.

Tox Chem No:103601 Glyphosate

Current date: 1/13/94

Isopropylamine salt

Laboratory(s): Springborn Laboratories, Inc., Life sciences Div. (SLS)

553 North Broadway, Spencerville, Ohio 45887

Monsanto Co., The Agricultural Group, Environmental Health Laboratory, (EHL)

654 Newstead, St. Louis, Missouri 63110

S T U D Y M A T E R I A L MRID NO R E S U L T S TOX CAT CORE GRADE

Acute Oral

MON 65005

Lot LUL-9304-5170-F

430209-02

LD₅₀ > 5000 mg/kg

IV Guideline

Limit Test (Rats)

3044.441 10/22/93

Springborn

Acute Dermal

Limit Test(Rats)

3044.442 10/22/93

Springborn

LD₅₀ > 5000 mg/kg

IV Minimum

Acute Inhalation

LC₅₀ study(Rats)

EHL 93053 11/2/93

Monsanto

LC₅₀ > 3.3 mg/L

III Minimum

Eye Irritation

in Rabbits

3044.401 8/2/93

Springborn

Mon 65005

Lot RUD-9211-4635-F

430209-04

Clear by day 7

III Minimum

Dermal Irritation

in Rabbits

3044.443 10/22/93

Springborn

Mon 65005

Lot LUL-9304-5170-F

430359-02

Slightly irritating

IV Minimum

Sensitization

in Guinea Pigs

3044.444 10/22/93

Springborn

Not sensitizer

430359-03

NA Minimum

141
MON-65005®

Herbicide by Monsanto

Complete Directions for Use

EPA Reg. No. 524-XXX

AVOID CONTACT WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT.

® MON-65005 is a registered trademark of Monsanto Company.

1994-1

A-000.01

Read each of these sections of this label for essential product performance information.

USE THESE CONVENIENT SECTION MARKERS.

GENERAL INFORMATION

MIXING, ADDITIVES AND APPLICATION
INSTRUCTIONS

WEEDS CONTROLLED

NONCROP USES

CROPPING SYSTEMS

MINIMUM TILLAGE

TREE AND VINE CROPS

Read the entire label before using this product.

Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

REFORMULATION IS PROHIBITED. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

LIMIT OF WARRANTY AND LIABILITY

15
This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet (''Directions'') when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

(INDEX PAGES)

PRECAUTIONARY STATEMENTS

Hazards to
Humans and Domestic Animals

Keep out of reach of children.

CAUTION!

HARMFUL IF INHALED.
CAUSES EYE IRRITATION.

16
Avoid contact with skin, eyes or clothing.

Avoid breathing vapor or spray mist.

FIRST AID: IF INHALED, remove individual to fresh air. Get medical attention if breathing difficulty develops.

IF IN EYES, flush with plenty of water. Get medical attention if irritation persists.

Personal Protective Equipment

Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Physical or Chemical Hazards

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY

MONSANTO

Food · Health · Hope



449665-00

Dennis P. Ward, Ph.D.
Regulatory Affairs Manager
(636) 737-6631

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
<http://www.monsanto.com>

November 3, 1999

Document Processing Desk (APPL)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, DC 20460

Attn: James A. Tompkins
Team Leader 25

Subj: Application for Registration of an End-Use Formulation
Roundup® Concentrate Weed & Grass Killer2 (EPA Reg. No. 71995-^{EA}~~xx~~)

Dear Mr. Tompkins:

Monsanto herein submits an application for registration of a new pesticide end-use formulation identified as *Roundup® Concentrate Weed & Grass Killer2*. This product is a broad spectrum herbicide for use in the lawn and garden market that contains the isopropylamine salt of glyphosate as an active ingredient.

This application is comprised of the Transmittal Document and two volumes of supporting information. In conformance with the instructions provided in the 1992 'Blue Book', one unbound copy of the administrative materials (Volume 1) and three bound copies of data (Volume 2) are provided.

Volume 1 contains the following administrative materials and draft labeling:

- Application for Pesticide Registration (EPA Form 8570-1)
- Confidential Statement of Formula (EPA Form 8570-4)
- Draft Labeling (5 copies)
- Certification with Respect to Citation of Data (EPA Form 8570-34)
- Data Matrix (EPA Form 8570-35)
- Supplemental information, including CSFs for two currently registered products.

Volume 2 contains the following data:

- Product chemistry studies (Guideline Series 61, 62 and 63).

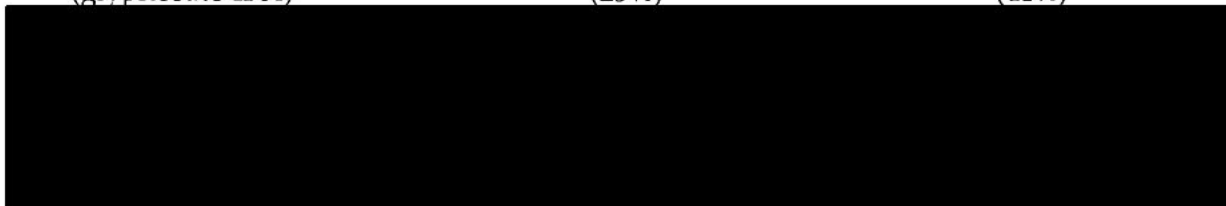
11/03/1999

Page -2-

Monsanto requests that the Agency allow the use of previously submitted acute toxicity and irritation studies with MON 77360 to support this application for registration of *Roundup Concentrate Weed & Grass Killer2*. These studies and their MRID numbers are listed in the Data Matrix. The Monsanto formula, MON 77360, is currently registered as *Roundup Ultra Herbicide* (EPA Reg. No. 524-475, Alternate Formulation) and *Roundup Rainfast Super Concentrate Weed & Grass Killer* (EPA Reg. No. 71995-18, Alternate Formulation C - formerly EPA Reg. No. 239-2654). Copies of the Confidential Statements of Formula for these two products are included at the end of Volume 1 as Supplemental Information.

MON 77360 is a water-based formulation containing 41% glyphosate-isopropylamine, 14.5% surfactant and [REDACTED] *Roundup Concentrate Weed & Grass Killer2* is an aqueous dilution of MON 77360 with a preservative added. The replacement of active ingredient and surfactant with water would simply dilute the toxicity and irritation potential. The following table provides a comparison of the two formulations:

<u>Ingredient</u>	<u>Roundup Concentrate Weed & Grass Killer2</u>	<u>MON 77360</u>
MON 0139	40.32%	66.13%
(glyphosate-IPA)	(25%)	(41%)



Label toxicity categories assigned to the studies supporting registrations 524-475 and 71995-18 are as follows:

Acute Oral Tox	- IV	Ocular Irritation	- III
Acute Dermal Tox	- IV	Skin Irritation	- IV
Acute Inhalation Tox	- IV	Dermal Sensitization	- Negative

Draft labeling submitted in support of this application for registration of *Roundup Concentrate Weed & Grass Killer2* carries a CAUTION signal word and precautionary language for eye irritation.

Should any questions arise during the Agency's evaluation of this application please feel free to contact Dr. Russell Schneider at our Washington DC office (202-383-2866) or myself directly. Thank you.

Sincerely,

Dennis P. Ward

Inert ingredient information may be entitled to confidential treatment

11/03/1999

Page -3-

Attachments

cc: R. P. Schneider (Monsanto/Wash Office)

TRANSMITTAL DOCUMENT

SUBMITTED BY

Monsanto Company
Lawn & Garden Products
600 13th St., N.W., Suite 660
Washington, DC 20005

REGULATORY ACTION IN SUPPORT OF WHICH THIS PACKAGE IS SUBMITTED

Application for Registration of *Roundup® Concentrate Weed & Grass Killer₂*
(EPA Registration Number 71995-~~E7~~)

TRANSMITTAL DATE


November 3, 1999

LIST OF SUBMITTED STUDIES:

Volume 1 (1 unbound copy)	Administrative Materials in Support of Application for Registration of <i>Roundup® Concentrate Weed & Grass Killer₂</i>
Volume 2 (3 bound copies)	<i>Roundup® Concentrate Weed & Grass Killer₂</i> , Product Identity and Composition Analysis and Certification of Product Ingredients, Physical and Chemical Analysis (Guideline Nos. 61, 62 and 63). Study No. 99004

MRID 44965501

COMPANY OFFICIAL:


Dennis P. Ward
Regulatory Affairs Manager

COMPANY NAME:

Monsanto Company

COMPANY CONTACT:

Russell P. Schneider, (202) 383-2866

NOV 12 1999

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs

MONSANTO COMPANY
LAWN & GARDEN PRODUCTS
600 13TH ST, NW., SUITE 660
WASHINGTON, DC 20005

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your transmittal of 11/05/99. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

Roundup® Concentrate Weed & Grass Killer₂
(EPA Reg. No. 71995-~~EA~~)

SUPPLEMENTAL INFORMATION

Monsanto requests that the Agency allow the use of previously submitted acute toxicity and irritation studies with MON 77360 to support this application for registration of *Roundup Concentrate Weed & Grass Killer₂*. These studies and their MRID numbers are listed in the Data Matrix. The Monsanto formula, MON 77360, is currently registered as *Roundup Ultra Herbicide* (EPA Reg. No. 524-475, Alternate Formulation) and *Roundup Rainfast Super Concentrate Weed & Grass Killer* (EPA Reg. No. 71995-18, Alternate Formulation C —formerly EPA Reg. No. 239-2654).

MON 77360 is a water-based formulation containing 41% glyphosate-isopropylamine, 14.5% surfactant and [REDACTED] *Roundup Concentrate Weed & Grass Killer₂* is simply an aqueous dilution of MON 77360 with a preservative added. The replacement of active ingredient and surfactant with water would simply dilute its toxicity and irritation potential.

Label toxicity categories assigned to the studies conducted with MON 77360 are as follows:

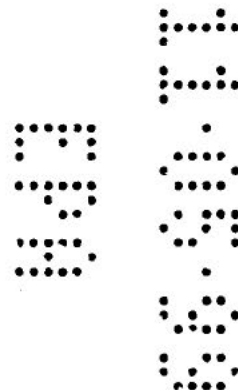
Acute Oral Tox	- IV	Ocular Irritation	- III
Acute Dermal Tox	- IV	Skin Irritation	- IV
Acute Inhalation Tox	- IV	Dermal Sensitization	- Negative

Draft labeling submitted in support of this application for registration of *Roundup Concentrate Weed & Grass Killer₂* carries a CAUTION signal word and precautionary language for eye irritation.

Copies of the following Confidential Statements of Formula are being submitted to aid in the Agency's consideration of this request:

- CSF for Roundup Ultra Herbicide, Alternate Formulation (EPA Reg. No. 524-475)
- CSF for Roundup Rainfast Super Concentrate Weed & Grass Killer, Alternate Formulation 'C' (EPA Reg. No. 71995-18, formerly 239-2654)

Inert ingredient information may be entitled to confidential treatment





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

11/09/99

OFFICE OF
PREVENTION, PESTICIDE AND
TOXIC SUBSTANCES

Monsanto Company, Lawn & Garden Products
600 13th St., N.W., Suite 660
Washington, DC 20005

PRODUCT NAME: Roundup Concentrate Weed & Grass Killer 2
COMPANY NAME: Monsanto Company, Lawn & Garden Products
OPP IDENTIFICATION NUMBER: 267187
EPA FILE SYMBOL: 71995-EA
EPA RECEIPT DATE: 11/05/99

SUBJECT: RECEIPT OF APPLICATION FOR A NEW REGISTRATION

DEAR REGISTRANT:

The Office of Pesticides Programs has received your application for a new registration and it has passed an administrative screen for completeness.

Please note that this is only a notification of receipt of your application. This is only the first step in the application process, and does NOT constitute approval.

If you have any questions please contact Jim Tompkins, Product Manager 25 at (703) 305-5697.

Sincerely,

A handwritten signature in cursive script, appearing to read "David L. Jones", is positioned above the typed name and title.

Front End Processing Staff
Information Services Branch
Information Resources & Services Division



United States
Environmental Protection Agency
Washington, DC 20460

☒ Registration
☐ Amendment
☐ Other

OPP Identifier Number

267187

Application for Pesticide - Section I

1. Company/Product Number 71995- EA	2. EPA Product Manager James A. Tompkins ✓	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Roundup Concentrate Weed & Grass Killer2	PM # 25 ✓	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company, Lawn & Garden Products 600 13 th St., N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input checked="" type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Application for registration of a new end-use formulation for the lawn and garden market. This product contains 25% isopropylamine salt of glyphosate as the active ingredient. This product is an aqueous dilution of two currently registered Monsanto end-use formulations: 71995-18 and 524-475.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____	
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per Container	If "Yes" Package wgt.	No. per Container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container Multiple sizes		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input checked="" type="checkbox"/> Other Pressure sensitive			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Russell P. Schneider		Title Regulatory Affairs Director		Telephone No. (Include Area Code) (202) 383-2866	
<p>Certification</p> <p>I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.</p>					
2. Signature 		3. Title Regulatory Affairs Manager		6. Date Application Received (Stamped)	
4. Typed Name Dennis P. Ward		5. Date November 3, 1999			



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 1.25 hours per response for registration and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the completed form to this address.

Certification with Respect to Citation of Data

Applicant's/Registrant's Name, Address, and Telephone Number Monsanto Company 600 13th Street, N.W., Suite 660 Washington, DC 20005 (202)783-2460	EPA Registration Number/File Symbol 71995- <i>EA 26</i>
Active Ingredient(s) and/or representative test compound(s) Glyphosate, isopropylamine salt CAS# 38641-94-0	Date November 3, 1999
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) Terrestrial (food/nonfood), Domestic Outdoor	Product Name Roundup Concentrate Weed & Grass Killer2

NOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☒ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

SECTION I: METHOD OF DATA SUPPORT (Check one method only)

<input type="checkbox"/> I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).	<input checked="" type="checkbox"/> I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).
--	---

SECTION II: GENERAL OFFER TO PAY

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements]

☐ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

SECTION III: CERTIFICATION

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.

☒ I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature 	Date 3 Nov 99	Typed or Printed Name and Title Dennis P. Ward Regulatory Affairs Manager
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

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DATA MATRIX

Date	November 3, 1999	EPA Reg No./File Symbol	71995- <i>EA</i>	Page	1 of 2
Applicant's/Registrant's Name & Address		Monsanto Company			
600 13th Street, N.W., Suite 660 Washington, DC 20005 (202)783-2460		Product Roundup Concentrate Weed & Grass Killer2			
Ingredient Glyphosate, isopropylamine salt CAS# 38641-94-0					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Series 61, 62 and 63	Product Chemistry Data to Support the Registration of Roundup Concentrate Weed & Grass Killer2	This submission	Monsanto	OWN	
81-1	Acute Oral Toxicity Study in Rats with MON 77360	44057202	Monsanto	OWN	
81-2	Acute Dermal Toxicity Study in Rats with MON 77360	44057203	Monsanto	OWN	
81-3	Acute Inhalation Study of MON 77360	44057204	Monsanto	OWN	
81-4	Primary Eye Irritation Study in Rabbits with MON 77360	44057205	Monsanto	OWN	
Signature	Name and Title Dennis P. Ward Regulatory Affairs Manager		Date 3 Nov 99		



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401 M Street, S.W.
WASHINGTON, D.C. 20460

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DATA MATRIX

Date	November 3, 1999	EPA Reg No./File Symbol	71995- EA	Page	2 of 2
Applicant's/Registrant's Name & Address	Monsanto Company 600 13th Street, N.W., Suite 660 Washington, DC 20005 (202)783-2460	Product	Roundup Concentrate Weed & Grass Killer ²		
Ingredient	Glyphosate, isopropylamine salt CAS# 38641-94-0				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
81-5	Primary Dermal Irritation Study in Rabbits with MON 77360	44057206	Monsanto	OWN	
81-6	Closed-Patch Repeated Insult Dermal Sensitization Study in Guinea Pigs with MON 77360 (Buehler Method)	44057207	Monsanto	OWN	
149					
Signature	Name and Title Dennis P. Ward Regulatory Affairs Manager			Date 3 Nov 99	

